Annual Report 1987-88

BC

Ministry of Agriculture and Fisheries
Hon. John L. Savage, Minister

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April 1, 1987 to March 31, 1988

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Ministry of Agriculture and Fisheries
Hon. John L. Savage, Minister

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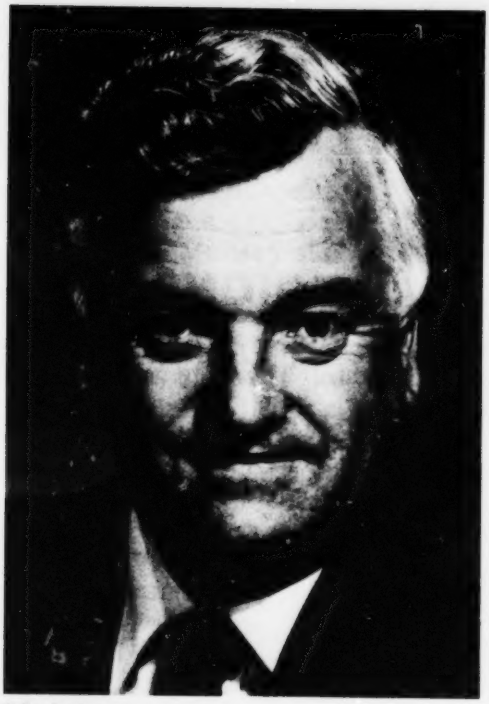

John L. Savage

To the Honourable
David Lam, C.M., LL. D.
Lieutenant-Governor of the
Province of British Columbia

May It Please Your Honour

I have the pleasure of submitting for your consideration the Annual Report of the Ministry of Agriculture and Fisheries for the 12-month period April 1, 1987 to March 31, 1988.

John L. Savage

John L. Savage
Minister of Agriculture and Fisheries

BC

Ministry of
Agriculture and Fisheries

AGRICULTURAL REGIONS

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Report of the Deputy Minister

To the Honourable John L. Savage
Minister of Agriculture and Fisheries

Sir:

I am pleased to present the annual report of the British Columbia Ministry of Agriculture and Fisheries, which summarizes the activities of your staff for the 12 months from April 1, 1987 to March 31, 1988.

The ministry's major function of extension-education and technology transfer continued to focus on improving farm profitability through an emphasis on farm business management concepts and the importance of linking marketing, economics and production decisions.

Marketing programs were emphasized to encourage industry to aggressively pursue domestic and export markets for existing products and to develop new products with a high potential for success in ever-changing and highly competitive world markets. Planning and promotion heightened for FOOD PACIFIC '88 (August 29 to September 2, 1988) and Aquaculture International '88, (September 6-9, 1988), both to be held in Vancouver.

Efforts continued on an examination of alternate marketing systems for B.C.'s agricultural products. Negotiations occurred with national agencies on national poultry and dairy commodity marketing schemes to obtain more flexibility for meeting shifts in market demands regionally and to gain a larger share of the national market for B.C. producers. Negotiations continued with the federal government and other provinces to change the tripartite red meat stabilization agreement to allow provinces such as British Columbia the opportunity to participate on an equitable basis.

Many aquaculture programs were developed for this rapidly expanding new industry. Commercial fisheries issues were dominated by follow up with industry and the federal government to the GATT decision that Canada's restrictions on the export of sockeye, pink salmon and roe herring were contrary to the GATT.

The ministry reviewed its programs in response to overall government directions on regionalization, privatization and downsizing, resulting in improved delivery of many services. A review of ministry staffing occurred as a result of the retirement of a number of long-serving employees.

Ministry staff worked diligently during the year to carry out programs of government for the benefit of the total agriculture, fisheries and food industry and its very substantial contribution to the provincial economy.

Respectfully submitted,

B.A. Hackett
Acting Deputy Minister

B.C. Ministry of Agriculture and Fisheries Mandate

The mission of the ministry is:

to facilitate the growth and development of the agriculture, fisheries, and food industry in British Columbia for domestic and export markets on a sound commercial basis.

Long-term Business Plan/Strategy - Ministry of Agriculture and Fisheries

Over the long term, the ministry has two broad objectives in helping the B.C. agriculture, fisheries, and food industry develop and grow. These are:

1. Creating a "level playing field" for the B.C. industry by:

* supporting national and provincial actions which will create greater market access, standardize regulations, and reduce competing subsidies

* supporting national strategies designed to generate more equitable incentive arrangements across provinces and with other nations, harmonize national and provincial financial programs, create co-operative export marketing efforts, and sustain our land/water resources

* adjusting agricultural safety-net programs in keeping with national and international objectives

2. Encouraging entrepreneurship and market development by the agriculture, fisheries and food industry by:

* encouraging aggressive development of new markets, products, and processes

* encouraging a total "food system approach" in order to reduce production costs and create new market opportunities

* enhancing competitiveness through effective technology transfer, applied research and development

* aggressively pursuing new opportunities such as aquaculture, game farming, specialty crops/livestock, and further processed food products

Agriculture Fisheries and Food in British Columbia --an Overview

Food production is an important activity in British Columbia, providing high-quality locally-produced food at reasonable prices. But more significantly, it is important for its economic impact -- the contribution it makes to the provincial economy.

British Columbia's agricultural products generate receipts to farmers of more than $1 billion each year. In 1987 the ocean fish catch was valued at $414 million and aquaculture production at $13.6 million. By the time British Columbia farm and fishery products reach the consumer, the activities of processing, transportation, storage, distribution and retailing have increased their value to $6.3 billion and provided more than 190,000 jobs for British Columbians, nearly 15 percent of the employed labour force of the province.

In an international context, B.C.'s food producers and processors operate in a competitive environment of changing economic conditions and fluctuating commodity supplies. It's an environment which poses challenges and requires flexibility -- but it also offers opportunities.

One of the most important areas of opportunity is in export markets. At present, B.C. exports more than 40 different primary agricultural products valued at $181 million to countries around the world. The province also exports primary fish products valued at $38 million and processed food products valued at $964 million.

There are opportunities for export of berries, tree fruits, greenhouse and nursery products. British Columbia's expertise in animal genetics, dairy technology, poultry processing, food storage, range management, pest management, irrigation and drainage is sought after by countries around the world. British Columbia's location on the Pacific coast gives the industry excellent access to the markets of the Pacific Rim.

The new agricultural industries of tree farming and game farming have potential for large-scale development. Since 1984, aquaculture production has grown rapidly as evidenced by marked increases in production and the number of salmon farms in operation.

The varied terrain and many regional climates of the province make British Columbia uniquely equipped to take advantage of the new opportunities in food production and marketing. More than 80 commodities are produced on 19,000 agricultural farms and more than 10 different species of fish and marine plants are grown by aquaculture farms. Some 350 processing businesses produce a wide variety of foods and beverages for the marketplace. The industry has an ability to adapt quickly to changing consumer demands.

Industry Performance and Ministry Program Highlights - 1987-88

Industry Performance

* Total agricultural farm cash receipts were up slightly from 1986 at $1.072 billion. Total farm net income rose almost $21 million to $308.2 million, exceeding the $300 million level for the first time.

* Cash receipts to B.C. farmers from all crops increased 2.5 percent, with horticultural and forage crops contributing most to the increase. Wheat and barley receipts declined as a result of soft export prices due to large stocks in Canada and the European Community and heavily subsidized sales by the United States and the European Community.

* The total ocean fish catch was valued at $414 million, up three percent from 1986, and the value of aquaculture production jumped 127 percent to $13.6 million.

* The value of manufactured food and beverage shipments increased to $3.8 billion, up nine percent from 1986.

* Retail sales of food and beverage products rose to an estimated $8.6 billion, an increase of about 6.1 percent from the previous year.

* Farm expenses declined for the third year in a row due mainly to reduced expenditures for rent, interest, feed, fertilizer and lime.

Create a Stable and Level Playing Field

* British Columbia and Canada signed an agreement to implement a tripartite price stabilization program for apples. The Tripartite Stabilization Agreement will reduce the provincial cost of stabilization for the tree fruit industry as a result of federal government participation in the program and will lead to more equitable levels of support across Canada.

* The Canada-U.S. Free Trade Agreement was initialled on January 2, 1988. Implementation of the agreement, along with a ruling by the General Agreement on Tariffs and Trade (GATT), will have a significant impact on B.C. grape growers. Under free trade, United States wines would be accorded the same treatment as B.C. wines over seven years regarding markups and other marketing practices. The GATT ruling requires Canada to provide equal domestic treatment for the wines, beers and spirits of all GATT member-countries.

* The ministry was influential in retaining special provisions for estate wineries and tariff snapback provisions for the horticultural sector in the Canada-U.S. free trade agreement.

Encourage Entrepreneurship and Industry Development

* In 1987-88 ministry education programs stressed the importance of integrating economics, production and marketing into the management of a farm business. District agriculturists and horticulturists are using computers in their work with producers to identify the costs and returns of alternative farming practices and techniques such as high-density orchards.

* Some 240 people attended Farm Business Challenges 1988, a business management conference organized by the ministry in conjunction with federal and university personnel. Other major workshops and shortcourses for the dairy, tree fruit, vegetable and berry sectors were successful. All extension programs focussed on farm business management and adoption of new technology to improve profitability.

* The farming of fallow deer and bison was approved by Cabinet. At year-end there were 10 approved fallow deer and nine approved bison farms.

* Reindeer farming was approved for the Peace River district in 1988. Importation of stock from the Northwest Territories will occur following completion of disease and parasite testing.

* The first commercial harvest of kiwifruit took place in 1987, yielding 23,000 kg.

* Preparations began for Food Pacific '88, the second biennial international food and beverage trade show held at B.C. Place Stadium.

* The implementation of the Feed Grain Market Development Program resulted in an additional estimated 84,600 tonnes of B.C. Peace River area feed grain being shipped and used by B.C. meat producers compared to the same period in 1986/87.

Organizational Efficiency

* Food inspection programs of the ministry, including abattoirs, dairy plants and fish processing plants, were transferred at year-end to the Ministry of Health.

* During 1987 the government announced termination of the Property Management Program operated by the Farmland Resources Branch. The properties administered by this program were transferred to the Ministry of Forests and Lands for administration effective March 31, 1988.

* Several ministry services were transferred to the private sector:

.. a group of employees in Kelowna bought the provincial Soil, Feed and Tissue Testing Laboratory and began private operation April 1, 1988;

.. the ministry adopted a publications policy which turned over printing of the crop production guides to the private sector;

.. the swine Record of Performance Program, which was operated jointly by the federal and provincial governments, was taken over by the Hog Marketing Commission.

Economic Performance of the Agriculture, Fisheries and Food Industry in 1987/88

General Economic Factors Affecting Agriculture, Fisheries and Food Performance

The British Columbia economy experienced another year of strong economic growth in 1987. Real gross domestic product grew by an impressive five percent, driven mainly by a sharp increase of 12.6 percent in business capital spending and strong export markets for resource commodities, particularly wood products and pulp and paper. Consumer spending also increased due to a four percent increase in real personal incomes and a two percent increase in employment.

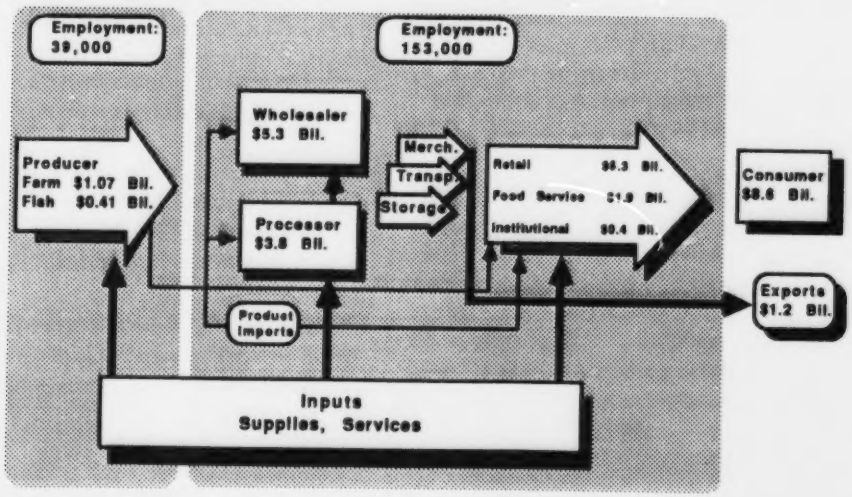
The unemployment rate decreased to 12 percent from 12.6 percent in 1986. The increase in consumer expenditures was reflected in a 39.9 percent increase in housing starts, a 10 percent increase in retail sales and a 17.5 percent increase in the value of manufacturing shipments.

Agriculture, Fisheries and Food Sector Performance

During 1987/88, all three components of B.C.'s agriculture, fisheries and food sector expanded for the fourth successive year since recession hit the general economy in 1983.

Total agricultural farm cash receipts increased to $1.072 billion, up slightly from the previous year. Market receipts from crops and livestock each rose 2.5 percent. Program receipts fell 64 percent as a result of a substantial decline in crop insurance due to good grain yields, and declines in income stabilization payments due to higher prices for hogs and beef.

British Columbia Agri-Food System



Farm expenses declined for the third year in a row to $789.1 million, their lowest level since 1980. This decline was led by reduced expenditures for rent, interest, feed, fertilizer and lime. The combined effect of higher receipts and lower expenses was a gain of 7.3 percent in farm net income which reached the level of $308.2 million, topping $300 million for the first time.

Returns from commercial fishing and aquaculture rose as a result of increased production in both sectors.

The value of manufactured food and beverage shipments increased to $3.8 billion, up nine percent from 1986, and retail sales of food and beverage products rose to an estimated $8.6 billion.

Gross Receipts

Crop Sector

Cash receipts to B.C. farmers from crops increased 2.5 percent in 1987. As in 1986 wheat and barley receipts declined because export prices remained soft due to large stocks in Canada and the European Community and heavily subsidized export sales by the United States and the European Community.

Oat receipts, on the other hand, rebounded from their low 1986 levels as prices improved due to reduced production in the United States. Canola receipts also rose above 1986 levels due to higher prices. Horticultural and forage crops, however, contributed most to the increase in crop receipts. Vegetable receipts rose 2.2 percent and tree fruit receipts increased 11.7 percent.

Sales of cut flowers and nursery plants continued to expand as in previous years, totalling $70.5 million, an increase of 8.3 percent over 1986. Following their impressive growth in 1986, forage crops increased a further 8.5 percent with receipts totalling more than $8 million, outstripping market sales of major grains such as barley and oats.

Livestock Sector

Total livestock receipts increased 2.5 percent in 1987. Dairy receipts dropped slightly due to marginal declines in the production of both fluid and industrial milk. Cattle and calf receipts increased 2.9 percent due to strong prices even though the herd building phase of the cycle reduced slaughterings. Hog receipts declined 9.7 percent, also reflecting significantly lighter marketings.

Benefitting from a six percent increase in the per capita demand for chicken and turkey meats, receipts from poultry marketings expanded a healthy 9.5 percent to $111.2 million. Egg receipts fell slightly as lower prices offset a small increase in production due to higher layer productivity.

Despite an increase in bee colonies and honey production, honey receipts were down due to lower prices. Fur product receipts showed a dramatic increase in 1987 due to a sharp rise in pelt production.

Fish Sector

B.C.'s ocean fisheries harvest in 1987 totalled 239,206 tonnes, an increase of 8.3 percent from 1986. The catch was valued at $414 million, up three percent from $402 million in 1986. The salmon catch was down 34 percent in volume and 29 percent in value from 1986, but herring landings more than doubled both in volume and value and made the major contribution to the increased value of the total catch. Halibut, groundfish and shellfish receipts also increased modestly.

Nearly 90 percent of B.C.'s fish catch is processed. In 1987, the processed value of all commercial fish products was estimated at $754 million, down 1.7 percent from 1986.

B.C. Fisheries Production 1987

	Landed Value $ mil.	Wholesale Value $ mil.
Salmon	190	395
Herring	114	186
Halibut	29	38
Shellfish	27	38
Groundfish	53	96
Other	1	1
TOTAL	**414**	**754**

The total production of aquaculture fish farms continued to show dramatic increases in 1987. Producer sales totalled $13.6 million, a 127 percent increase over 1986. Oysters represented 23 percent, salmon 74 percent and trout three percent of sales.

Farm Operating Expenses

The production expenses of farmers declined to their lowest level since 1980. Interest paid declined 7.4 percent due to a decrease in rates and a fall in the volume of farm debt for the fifth consecutive year, while feed costs fell 11.8 percent due to lower grain prices.

Other factors contributing to lower operating expenses included a 13.3 percent decline in fertilizer and lime expenditures and a 4.9 percent drop in payments for rent. Overhead expenses for depreciation declined 11 percent; however, some expense items showed increases, including property taxes up 7.1 percent, labour costs up 3.2 percent and feeder cattle purchases up 25.4 percent.

Farmland, Number of Farms and Employment

Statistics indicate there are about 900,300 hectares of improved land in B.C. and about 19,000 farms in operation.

Employment in agriculture remained at about 31,000 in 1987. The number of operators relying on their own labour was down while paid labour was up 6.2 percent, a reflection of easing pressure on farmers due to improved crop prices and declining debt in many sectors.

Fishing Vessels, Fish Farm Numbers and Employment

The ocean fishing fleet numbered 6,724 vessels with total direct employment in deep sea fishing at about 7,000 people.

In the aquaculture sector, the most rapid growth was in the number of salmon and trout farms which jumped to 329 in 1987 from 239 in 1986. Overall the number of aquaculture operations increased to 738 in 1987 from 591 the previous year.

Total employment on all farms (finfish, shellfish, marine plants and hatcheries) in 1987 was estimated at 1,200 persons.

Food Manufacturing

In 1987, there were about 400 B.C. manufacturers of food and beverage products.

Total shipments of food and beverage products by B.C. processors rose to an estimated $3.8 billion, an increase of nine percent from the previous year.

Due to increased processing activity, employment in the food and beverage manufacturing industry rose to an estimated 20,500 from 19,900 in 1986. Average weekly earnings remained at a similar level to the year previous.

Food Retailing

The growth in personal real incomes and employment in B.C. gave a stimulus to consumer spending on food through all retail channels. B.C. food products are retailed through a wide variety of outlets including grocery stores, food service outlets (restaurants, hotels, etc.), and institutions (hospitals, schools, etc.).

Sales of food and non-alcoholic beverages from stores reached an estimated $4.7 billion, up 3.4 percent from 1986. Food service industry sales, excluding alcoholic beverages rose 2.8 percent to about $1.85 billion. Institutional food outlet sales totalled an estimated $462 million while alcoholic beverage sales by stores and commercial and non commercial service outlets totalled $1.6 billion.

Total retail spending on food and beverages in B.C. was estimated at $8.6 billion, a 6.2 percent increase from $8.1 billion in the previous year.

Agricultural, Fish and Food Exports

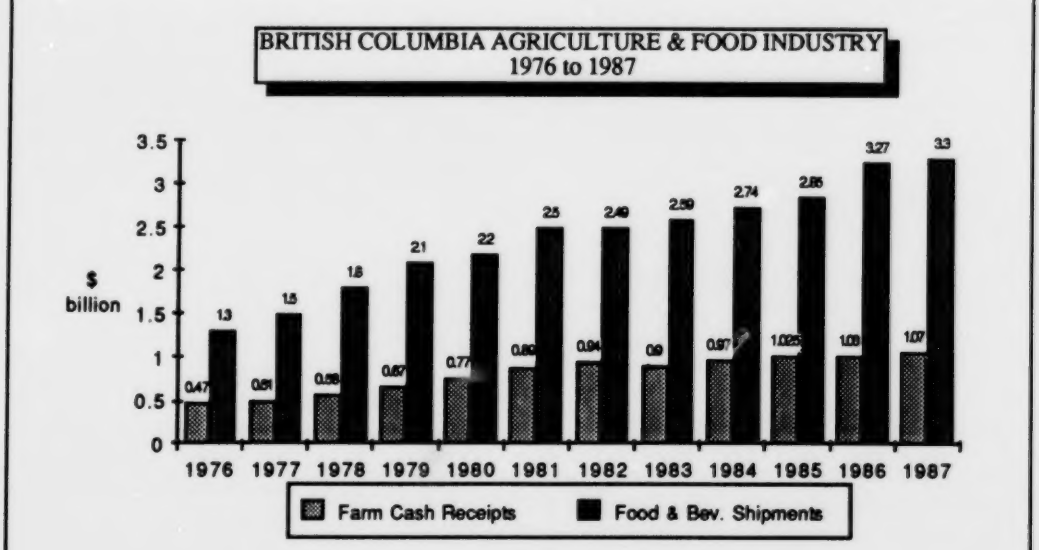
Agricultural, fish and food exports from B.C. totalled $1.2 billion in 1987, a 20 percent increase from 1986. Exports of primary agricultural products totalling $180.9 million rose a healthy 35 percent.

Processed food product exports, including fish, rose 16.5 percent to $964 million. Exports of fish products increased by 22 percent and remained the largest food export product from B.C.

KEY ECONOMIC INDICATORS, B.C.

	UNITS	1986	1987	% Change
Population	'000	2,889	2,925.7	1.3
No. of Farms	'000	19*	19*	NA
Est. Cultivated Farmland	acres	2,121,247*	2,121,247*	NA
Farm Cash Receipts	$ '000	1,064,069	1,072,053	0.7
Farm Exp. and Dep.	$ '000	803,771	789,118	-1.8
Fish Receipts - Landings	$ '000	404,687	410,000	1.3
Fish Products - Wholesale	$ '000	769,410	751,000	-2.4
Milk Sold off the Farm	'000 L.	478,621	475,076	-0.7
Poultry Production Receipts	$ '000	101,533	111,169	9.5
Chicken and Stewing	'000 kg. evic.	49,224	55,300	12.3
Egg Production	'000 doz.	52,918	54,700	3.4
Apple Production	'000 lbs.	266,290	437,377	64.2
Vegetable Production Receipts	$ '000	73,520	75,112	2.2
Floriculture and Nursery Prod.	$ '000	65,135	70,515	8.3
Honey Production	tonnes	1,980	2,110	6.6
Cattle	no. of head-July 1	678	672	-0.9
Hogs	no. of head-July 1	218	222	1.8
Sheep	no. of head-July 1	56.5	55	-2.7
Spring Wheat Prod.	'000 tonnes	84	106	26.2
Canola/Rapeseed Prod.	'000 tonnes	50	57	14.0
Barley Production	'000 tonnes	174	137	-21.3
Food Mfg. Shipments Incl. Fish	bil.$	3.52	3.84	9.1
Primary Agri. Prod. Exports	$ '000	134,403	180,857	34.6
Food and Bev. Prod. Exports	$ '000	846,358	988,295	16.8
B.C. Farm Prices Index	1981 =100	109.6	111.3	1.6
C.P.I. Food (Vancouver)	1981=100	126.4	130.7	3.4

* Figures are from Statistics Canada 1986 Agricultural Census.



BRITISH COLUMBIA FARM CASH RECEIPTS
($'000)

	1985	1986	% Change 85/86	1987	% Change 86/87
CROP RECEIPTS					
Wheat	18,721	11,353	-39.4	8,272	-27.1
Oats	1,299	958	-26.4	1,148	19.8
Barley	11,663	7,733	-33.7	5,945	-23.1
Rye	187	72	-61.5	102	41.7
WGSA Payments	3,374	5,360	58.9	8,087	50.9
Crop Insurance	14,310	18,503	29.3	9,890	-46.6
CWB Adv./Repay./Defer./Liq.	3,221	609	-81.1	366	-39.9
Canola/Rapeseed	10,838	3,290	-69.6	3,852	17.1
Potatoes	22,202	21,625	-2.6	20,820	-3.7
Other Vegetables	71,266	73,520	3.2	75,112	2.2
Tree Fruits		44,583		49,814	11.7
Berries and Grapes		69,152		69,881	1.1
Floriculture & Nursery	60,294	65,135	8.0	70,515	8.3
Forages		7,926		8,602	8.5
Other Crops		30,765	-2.3	37,239	21.0
TOTAL CROPS	**347,359**	**360,584**	**3.2**	**369,645**	**2.5**
LIVESTOCK RECEIPTS					
Cattle	122,543	134,343	9.6	132,498	-1.4
Calves	27,047	46,309	71.2	53,466	15.5
Hogs	46,847	54,343	16.0	49,077	-9.7
Sheep, Lambs, & Wool	1,855	2,020	8.9	2,423	20.0
Dairy Products	228,153	231,737	1.6	231,263	-0.2
Poultry	91,659	101,533	10.8	111,169	9.5
Eggs	59,537	59,823	0.5	58,871	-1.6
Honey	5,190	4,240	-18.3	3,876	-8.6
Fur	7,154	3,522	-50.0	11,202	218.1
Other Livestock	8,850	9,568	8.1	9,808	2.5
TOTAL LIVESTOCK	**598,835**	**647,438**	**8.1**	**663,653**	**2.5**
OTHER RECEIPTS					
Forest Products	13,461	14,854	10.4	15,051	1.3
Provincial Income Stabilization	20,809	21,399	2.8	3,496	-83.7
Dairy Supplementary Payments	9,894	10,227	3.4	10,423	1.9
Deficiency Payments	4,275	1,243	-70.9	4,233	240.6
Other Supplementary Payments	3,986	8,324	108.8	5,552	-33.3
TOTAL OTHER RECEIPTS	**52,425**	**56,047**	**6.9**	**38,755**	**-30.9**
TOTAL CASH RECEIPTS	**1,019,524**	**1,064,069**	**4.4**	**1,072,053**	**0.8**

BRITISH COLUMBIA FARM OPERATING EXPENSES & DEPRECIATION

($'000)

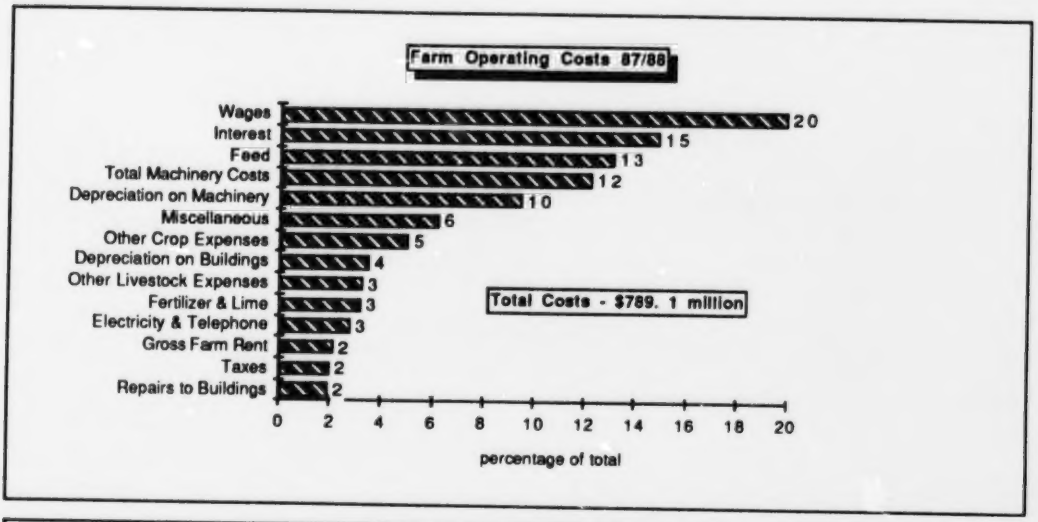
	1985	1986	% Change 85/86	1987	% Change 86/87
OPERATING EXPENSES					
Property Taxes	14,517	14,807	2.0	15,858	7.1
Gross Farm Rent	17,461	18,058	3.4	17,178	-4.9
Wages for Agricultural Labour	147,340	153,866	4.4	158,833	3.2
Interest on Indebtedness	134,313	122,322	-3.9	113,285	-7.4
Total Machinery Expenses	103,532	95,230	-8.0	97,630	2.5
Fertilizer and Lime	30,689	29,225	-4.8	25,329	-13.3
Other Crop Expenses	36,113	38,440	6.4	40,326	4.9
Feed	121,255	117,695	-2.9	103,859	-11.8
Other Livestock	19,273	20,594	6.9	25,825	25.4
Repairs to Buildings	13,955	15,165	8.7	15,392	1.5
Electricity & Telephone	22,555	22,343	-0.9	22,410	0.3
Miscellaneous Expenses	49,954	48,108	-3.7	49,523	2.9
TOTAL	**705,742**	**695,853**	**-1.4**	**685,448**	**-1.5**
DEPRECIATION CHARGES					
Depreciation on Buildings	33,423	31,418	-6.0	27,962	-11.0
Depreciation on Machinery	74,979	76,500	2.0	75,708	-1.0
TOTAL	**108,402**	**107,918**	**-0.5**	**103,670**	**-3.9**
TOTAL OPERATING EXPENSES and DEPRECIATION	**814,144**	**803,771**	**-1.3**	**789,118**	**-1.8**

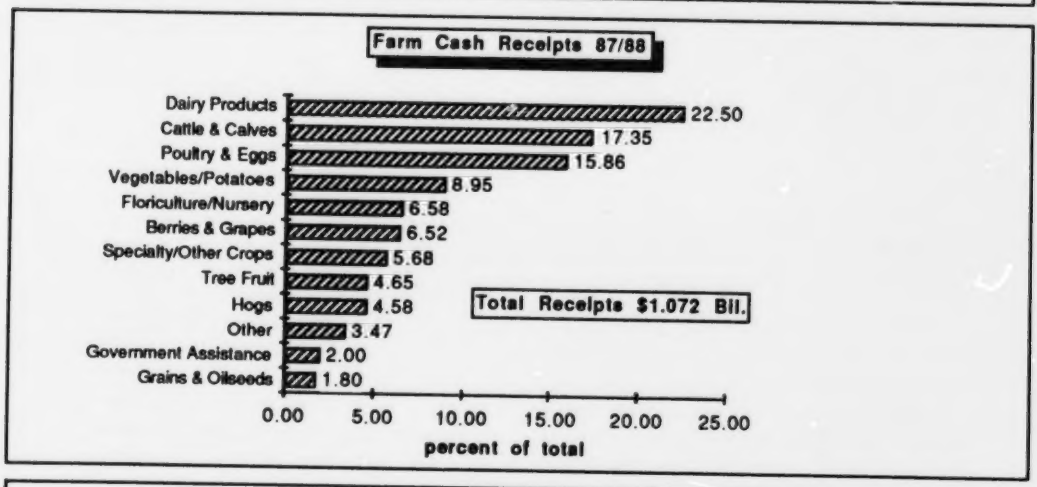
BRITISH COLUMBIA NET FARM INCOME

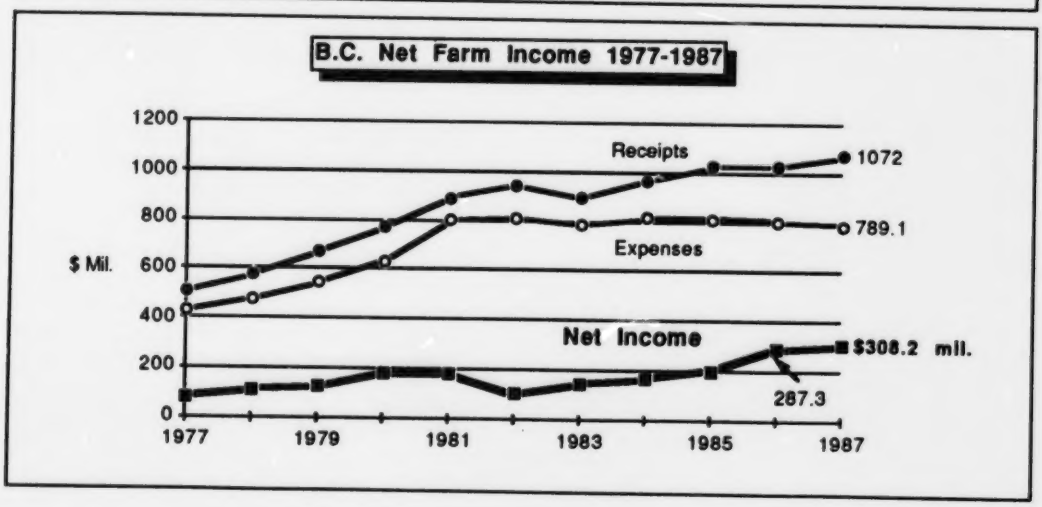
($'000)

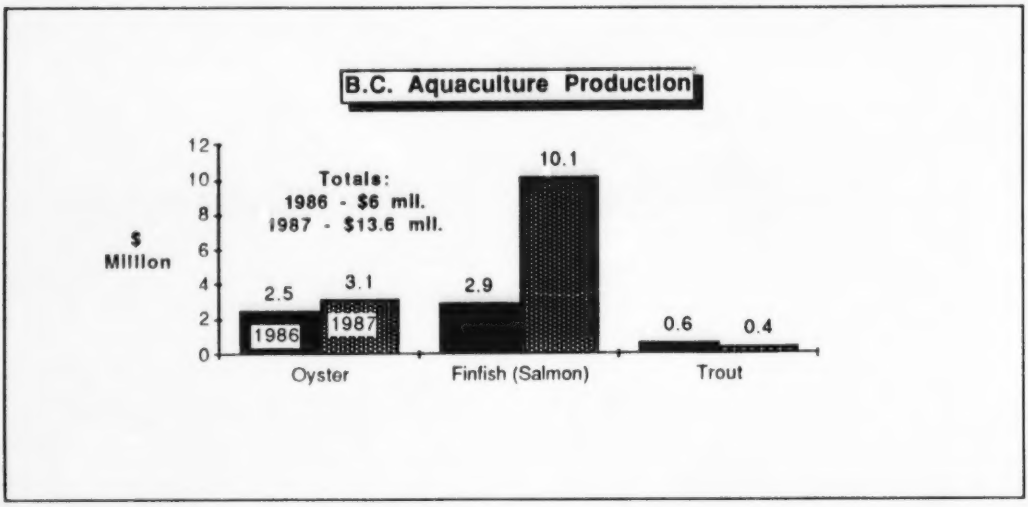
	1985	1986	% Change 85/86	1987	% Change 86/87
NET FARM INCOME					
Farm Cash Receipts	1,019,524	1,064,069	4.4	1,072,053	0.8
Plus Income-in-Kind	19,894	19,268	-3.2	19,148	-0.6
Realized Gross Income	1,039,418	1,083,337	4.2	1,091,201	0.7
Less Oper. Exp. and Depreciation	814,144	803,771	-1.3	789,118	-1.8
Realized Net Income	225,274	279,566	24.1	302,083	8.1
Plus Value of Inventory Change	-28,834	7,746	-126.9	6,101	-21.2
TOTAL	**196,440**	**287,312**	**46.3**	**308,184**	**7.3**

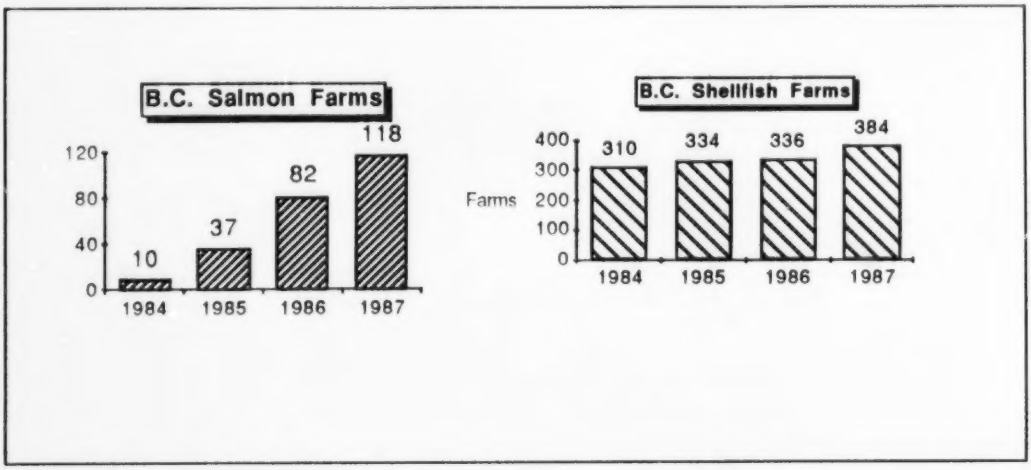
Source: Statistics Canada, Agriculture Division
June 2, 1988

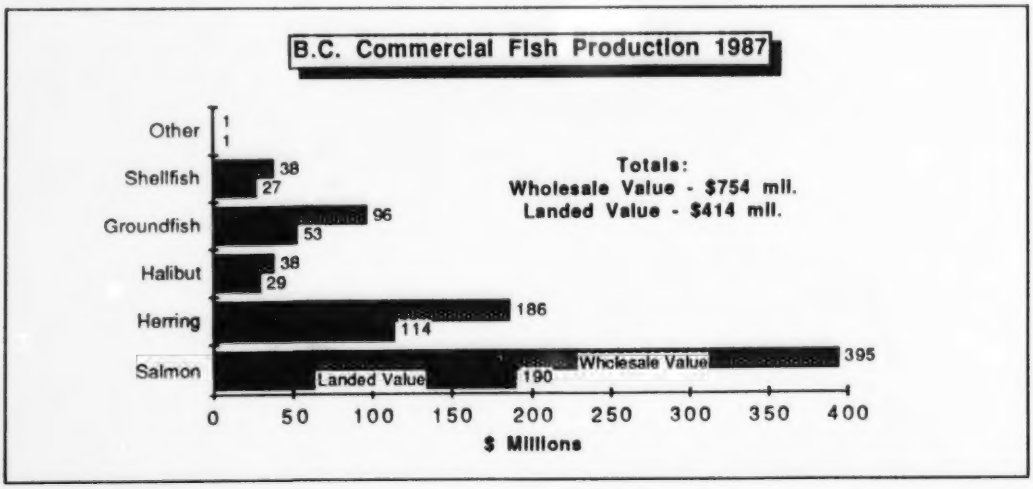

Farm Operating Costs 87/88
Wages 20
Interest 15
Feed 13
Total Machinery Costs 12
Depreciation on Machinery 10
Miscellaneous 6
Other Crop Expenses 5
Depreciation on Buildings 4
Other Livestock Expenses 3
Fertilizer & Lime 3
Electricity & Telephone 3
Gross Farm Rent 2
Taxes 2
Repairs to Buildings 2
Total Costs - $789. 1 million
0 2 4 6 8 10 12 14 16 18 20
percentage of total


Farm Cash Receipts 87/88
Dairy Products 22.50
Cattle & Calves 17.35
Poultry & Eggs 15.86
Vegetables/Potatoes 8.95
Floriculture/Nursery 6.58
Berries & Grapes 6.52
Specialty/Other Crops 5.68
Tree Fruit 4.65
Hogs 4.58
Other 3.47
Government Assistance 2.00
Grains & Oilseeds 1.80
Total Receipts $1.072 Bil.
0.00 5.00 10.00 15.00 20.00 25.00
percent of total


B.C. Net Farm Income 1977-1987
1200
1000
800
600
400
200
0
$ Mil.
Receipts
1072
789.1
Expenses
Net Income
$308.2 mil.
287.3
1977 1979 1981 1983 1985 1987


B.C. Aquaculture Production
$ Million
12
10
8
6
4
2
0
Totals:
1986 - $6 mil.
1987 - $13.6 mil.
2.5
3.1
2.9
10.1
0.6
0.4
1986
1987
Oyster
Finfish (Salmon)
Trout


B.C. Salmon Farms
120
80
40
0
10
37
82
118
1984
1985
1986
1987
B.C. Shellfish Farms
Farms
400
300
200
100
0
310
334
336
384
1984
1985
1986
1987


B.C. Commercial Fish Production 1987
Other
Shellfish
Groundfish
Halibut
Herring
Salmon
1
1
38
27
96
53
38
29
186
114
Landed Value
190
Wholesale Value
395
Totals:
Wholesale Value - $754 mil.
Landed Value - $414 mil.
0
50
100
150
200
250
300
350
400
$ Millions

B.C. Ministry of Agriculture and Fisheries Programs

The production of food plays an important role in the economy of British Columbia. Programs of the B.C. Ministry of Agriculture and Fisheries assist in the continuing growth and development of a strong agriculture, fisheries and food industry.

The ministry plans and organizes its activities on the basis of several major program areas:

Extension-education programs encourage the adoption of new technology, information and management skills;

Fish industry development programs enhance the growth of the aquaculture and commercial fisheries industries;

Food industry and market development programs help food businesses find new markets and develop new products and processes;

Financial assistance programs reduce risk and stabilize farm income; they also provide loans, loan guarantees and grants to encourage industry development and enable businesses to take advantage of new opportunities;

Resource sustainability and development programs encourage sound use and development of natural resources;

Plant health, animal health and product quality programs ensure maintenance of high standards for the benefit of food businesses and consumers.

Executive and support services of the Ministry provide for program development and implementation. They include policy development and planning, economic analysis, communications and administrative services.

Major Program Issues Affecting B.C. Agriculture, Fisheries and Food Industry

In order to ensure continued industry growth and development, the ministry dealt with a number of issues having a significant impact on the structure and growth potential of the agriculture and fisheries sector. These issues include:

* Supply Management: B.C. continued negotiations with national agencies to increase the B.C. allocation of the national quota for industrial milk, chicken, turkey, and eggs. Major proposals were aimed at creating more flexible systems which would be responsive to regional shifts in markets and demands. British Columbia's quota allocation is considered inadequate and restricts the B.C. industry from effectively serving market needs.

During the year, B.C. served notice of its intent to withdraw from national marketing schemes unless mechanisms for determining quota allocation became more flexible. At year-end, negotiations were continuing. (Further details of these activities are available in the annual reports of the B.C. Milk Board and the B.C. Marketing Board.)

* Appropriate share of national programming: Efforts continued to obtain a more equitable share of national funding for the B.C. agri-food sector. For example, B.C. continued to seek entry into national tripartite stabilization programs particularly for red meat and apples. At year-end, agreement had been reached on participation in the apple plan, but entry into the red meat plan continues to be at issue due to lack of consensus on treatment of various provincial support programs.

* International Trade: The industry realized improved access to export markets for B.C. products through Free Trade Agreement negotiations, GATT panel rulings, overseas missions, and incoming buyer missions.

B.C. continued to push for increased harmonization of standards particularly regarding pesticides and herbicides. There were continuing efforts to obtain adjustment measures for those sectors adversely affected by the trade policies.

* Government Regionalization and Privatization Initiatives: During the year, programs were evaluated in keeping with government's mandate to further involve the private sector in program delivery whenever feasible and appropriate. By year-end, several programs/services were either privatized or being considered for privatization.

The ministry responded to the regionalization initiative by appointing senior staff to serve as regional designates. Their task was to work with staff of the Ministers of State to resolve issues, and facilitate examination of regional proposals for development. As an example, at year-end, a project officer was designated to facilitate implementation of a reindeer development proposal in the Peace River region of B.C.

1987-88 Programs and Initiatives

Extension and Education

The ministry has a staff of agricultural professionals in all three agricultural regions of the province who help food producers and businesses access and use the best available information on financial management, production techniques and marketing. They are assisted by specialists in eight branches.

Ministry staff work with producers by presenting seminars, short courses and workshops. Extension-education projects include field trials and variety evaluations, publication of technical information and production of slide shows, videotapes and films for use by producers and commodity groups, agribusiness, policy developers, extension staff and ministry managers.

In 1987 efforts were made to involve the private sector in preparation of some educational materials, including printing and distribution of ministry technical publications.

Ministry extension-education programs emphasize the importance of integrating economics, production and marketing into the management of a farm business. A ministry-wide program, Planning for Profit, was developed by ministry farm management specialists. Ministry extension staff received training in farm management principles and the use of computers for decision-making. This resulted in staff using computers to more effectively work with farmers in conveying advanced farm management principles.

Ministry staff assisted in the organization of Farm Business Challenges - 1988, a business management conference attended by more than 240 people. Participants included leading commercial farmers, representatives of agri-business, farm advisors and consultants. Conference speakers provided farmers with timely information to help them deal with business challenges. The ministry's audio-visual unit prepared 11 videos based on presentations at the seminar by farm business experts. The videos are used by staff and farmers as valuable reference advice from recognized experts who would otherwise not be accessible to the large majority of B.C. farmers.

The following review outlines current economic situations and ministry activities and programs for the animal and plant industries. Financial assistance programs for specific commodities are also included in this section.

Animal Industry

Dairy

The British Columbia dairy industry continued to be the largest sector in B.C. agriculture. In 1987 farm cash receipts from dairying were $231 million, slightly below the receipts for 1986 due to marginal declines in the production of both fluid and industrial milk. These receipts accounted for 22 percent of the provincial total farm cash reciepts. Milk production per cow increased by more than 100 kg in 1987 from 1986 to more than 7,900 kg per cow, more than 500 kg above the Canadian average.

Dairy producers continued to benefit from the low cost of feed grains. Holstein calves brought higher prices due to a shortage of feeder cattle.

Ministry staff developed a computer program which provides financial and production information to help dairy farmers increase efficiency.

Formulation of economical feed mixes is a continuing concern of dairy producers. The ministry animal nutritionist investigated computer programs that develop information on feed costs for high-producing cows. A dairy nutrition reference guide is planned for publication.

More than 600 producers, industry representatives and government staff attended each day of the annual two-day Dairy Producers' Short Course. The course is sponsored by the South Coastal Dairy Education Advisory Committee, made up of ministry representatives and dairy producers. Producers heard presentations on dairy cattle nutrition, reproduction and forage production. Guest instructors included a veterinarian from Georgia and a specialist in cattle nutrition from Wisconsin.

Staff of the Dairy and Food Laboratory helped five dairies set up their own product quality control programs and trained dairy employees to run the programs.

Poultry and Eggs

Poultry and egg production generated $170 million in 1987. Receipts from poultry marketings expanded a healthy 9.5 percent to $111.2 million, with poultry producers benefitting from a six percent increase in the per capita demand for chicken and turkey meats. Chicken production reached 55.3 million kilograms, up from 49.2 million kilograms in 1986 and turkey meat production totalled 10.8 million kilograms, up from 10 million kilograms in 1986. Egg receipts fell slightly as a price drop offset a small increase in production due to higher layer productivity.

The Broiler Health Program continued as a joint project of the ministry and the B.C. Chicken Marketing Board. It was started several years ago to reduce above-average broiler losses due to deaths, culling and condemnations. The program monitors blood samples to determine the effectiveness of vaccines and vaccine regimens. Changes in vaccine practices have resulted in improved health and more economical production of broilers.

Beef

Prices for live cattle were very strong during 1987, which provided cow-calf producers with significant increases in revenue, encouraged producers to begin rebuilding their breeding herds, and significantly reduced government farm income insurance program payouts to the beef sector during the year.

There was a slight increase in cows and heifers to 253,000 head from 249,000 in 1986. Farm cash receipts showed a 2.9 percent increase to $186 million.

The industry remained optimistic in spite of dry weather that threatened not only range forage but supplies of stock water.

A large volume of B.C. feeder cattle continued to be shipped to Alberta feedlots for finishing due in part to Alberta government support programs that reduce the cost of livestock feed in that province. As a result, B.C. developed the B.C. Feed Grain Market Development Program which provided an incentive for B.C. grain producers to sell feed grains into the market for consumption by B.C. livestock producers. The program encourages the movement of Peace River grain from traditional export routes to a more reliable domestic market in the south of the province.

An incentive of $11 per tonne is provided to the province's eligible red meat producers to use B.C. feed grain. There were 1,242 registrants in the program, many of whom are grain producers.

Beef cattle ranchers received $1.5 million in funding from ARDSA for construction or expansion of storage facilities for hay, silage and feed grains. Improved feed storage is expected to reduce hay losses by as much as 20 percent and silage losses by 10 percent. Market weights of calves are also expected to increase as a result of improved feed quality.

Educational events for beef producers included a tour of coastal feedlots and packing plants and a herd health and performance seminar in Clinton. Ministry staff co-operated with the Bank of Montreal and B.C. Livestock Producers' Co-operative in presentation of a cattle handling and "agri-outlook" seminar.

Swine

The total number of hogs marketed declined four percent to 341,217 and prices declined two percent to an average price of $80.60/cwt. As a result, the value of hogs marketed in 1987 was $49 million, a decline of 9.7 percent from the previous year. Despite this situation, receipts were still the third highest on record putting the hog industry in a generally profitable position for the year.

Ministry staff helped the B.C. Purebred Swine Breeders Association prepare video tapes for a sale of breeding stock. The sale using video brought an average price of $567 on 42 boars and gilts sold. This video-sale allowed buyers in one location to see sale animals in their home farm location which is convenient and saves costs of transportation for the seller.

The Swine Herd Health Program, designed to improve health and production of British Columbia breeding herds, continued. At present $1.5 million worth of breeding stock is imported each year by B.C. hog producers. The 17 participating herds provide a local source of breeding stock with documented health status. Marked improvement in herd health has been attributed to the program.

Ministry staff were involved in the designing and testing of a system for treatment of swine manure so that it can be safely discharged. Based on work carried out at the University of British Columbia, a three-stage Sequencing Batch Reactor was successfully used to treat swine manure on a south coastal region farm. The project was funded under the DATE program. Further testing and refinement of this approach will be done at U.B.C. and funded through ARDSA over the next two years.

Sheep

Sheep production in the southern interior of the province has seen a revival in recent years because of improved prices for meat and wool resulting in higher receipts (producers' cash receipts rose 20 percent in 1987) and in the Kamloops area, an opportunity to access Crown grazing on forest clearcut sites.

Staff co-operated with the Ministry of Forests on two projects which demonstrate the benefits to forest companies of sheep grazing on newly replanted areas. Sheep numbers on Crown range have risen from a small pilot project flock of 50 in 1985 to more than 4,000 head in 1987.

Red Meat Programs:

During the year, B.C. continued negotiations aimed at gaining access to a tripartite price stabilization program for producers of red meat. Several provinces are already signatories to the program, which involves participation by federal and provincial governments and producers.

A study of all forms of government assistance to red meat producers was completed by an independent consultant. The study, and an agreement worked out in July, 1987 at a conference of provincial agriculture ministers, resulted in an understanding that all provincial programs, whether cost reducing or income enhancing, have an impact on the industry.

The existence of British Columbia's income enhancement ("top loading") programs has precluded the participation of B.C. producers in tripartite stabilization programs.

The expectation is that if B.C. should achieve a fair entry agreement, producers would benefit from a single national income stabilization program that could reduce the cost of or replace the existing Farm Income Insurance and other ad hoc programs.

During 1987, due to high prices in the beef, swine and hog sectors, indemnity payments to producers under the farm income insurance program were lower than they have been for several years. As well, due to continued premium payments by government and producers, funds on deposit for use during future price downturns increased significantly.

Game Farming

The farming of fallow deer and bison was approved by Cabinet in May. There are 10 approved fallow deer farms with approximately 400 head and nine approved bison farms with approximately 500 head. Game farming will provide an opportunity for livestock producers to diversify their operations.

Reindeer farming was approved for the Peace River district in February, 1988. Importation of domestic reindeer from the Northwest Territories will begin once disease and parasite testing have been completed.

The ministry's brand inspection service assisted in development of a system of tagging and record keeping for game farm animals.

The fox farming industry has expanded 25 to 30 percent over the past several years. There are 28 producers with 2,200 breeding animals in the Peace River region.

The ministry sponsored the keynote speakers at the annual fox farming seminar in 1987, and helped plan and fund a seminar on the topic of fox artificial insemination.

Apiculture

The apiculture industry comprises 450 commercial and 4,500 home beekeepers with a total of 58,600 hives. While producer receipts from honey sales declined, the value

of all apiculture products, which in addition to honey includes pollen, beeswax, package bees and queen sales and pollination rental, totalled $5.3 million, an increase of eight percent over 1986. The increase was due to 14 percent growth in pollination rental income, hive productivity and increased sales of queens and package bees.

A test of a device for honeybee queen rearing resulted in a 15 percent increase in efficiency. In order to overwinter large numbers of queens, an ARDSA project is continuing at Simon Fraser University to develop effective overwintering techniques.

As a result of a bee overwintering ARDSA-funded project in the Peace River region, inside overwintering of production hives is expected to increase by 30 percent.

Plant Industry

Tree Fruits

Tree fruit production was up in 1987, with all commodities recording increases over 1986. There were average to above-average crops in the Okanagan Valley from Summerland north, while more southerly areas had very heavy crops. Apple production was up significantly, combining with record production in Washington State to depress apple prices received by B.C. growers. Receipts for all tree fruits, however, increased 11.7 percent.

In 1987 British Columbia and Canada entered into an agreement to provide a price stabilization program for apple producers. The final agreement satisfactorily addressed British Columbia's concern that all government programs of assistance, whether cost reducing or income enhancing, should be treated equitably within any tripartite agreement.

High-density orchard plantings are expected to increase yield, improve fruit quality and provide the best opportunity for profit in the industry. A $1.5 million ARDSA program announced in 1987 will provide grants of up to 33.3 percent of capital costs of orchard renovation including removal of old trees and replacement with high density plantings.

The Orchard Renovation-Incentive Program funded through ALDA provides loans of up to $50,000 per orchardist to remove non-productive trees and replant the area to high-density trees. The loan is at a low interest rate (one-half prime) and is repayable over a 15-year period.

A number of ministry staff presented technical papers on cultural, economic and technological considerations in renovating orchards to high-density plantings to growers attending the B.C. Fruit Growers' Association Horticultural Forum in November.

A DATE project is evaluating the effectiveness of various irrigation systems and application rates in frost protection. The project will continue for the next three to five years with assistance from the Ministry of Environment. Reducing frost damage could save tree-fruit producers $1.75 million each year that frost is a problem.

Staff of the Soil, Feed and Tissue Testing Laboratory in Kelowna developed a method for determining the amount of sulphur required to lower the pH of alkaline orchard soils to increase productivity.

An analysis of the B.C. tree fruit industry by ministry staff was completed. The report outlines options for government support for the tree fruit industry and identifies the benefit to be realized from adoption of new technology such as intensive orchard systems and new varieties in an effort to revitalize the industry.

Grapes

Grape production totalled 16.52 million kilograms, up from 13.42 million kilograms, in 1986, despite reductions in acreage under a red wine rationalization program. Total production was the highest it has been since 1985.

Production of grapes for varietal wines has risen sharply from 11.6 percent in 1985 to 21.3 percent in 1987. Production of high-quality grapes and specialty wines is seen as an opportunity for B.C.'s grape and wine industries under the Canada-U.S. Free Trade Agreement.

A project funded by ARDSA with support from the industry is evaluating 70 different cultivars, primarily from Hungary and Germany, to determine if they are suitable for production in British Columbia.

Results of a 14-year variety evaluation carried out by the ministry in co-operation with commercial producers have been made available to the industry. A total of 126 varieties and eight rootstocks were evaluated. The project resulted in 11 vinifera and 21 hybrid varieties being recommended to the industry. Wine quality results will be published during 1988.

The ministry grape specialist participated in a study tour of the New Zealand grape/wine industry in early 1988 to identify cultural and technological information that could be effectively used by B.C. growers. Information included mechanization of vineyards, use of windbreaks, greenhouse grape production and the effects of a new Australia-New Zealand trade agreement.

Berries

Although the strawberry crop initially appeared to be threatened by red stele root rot, strawberry, blueberry and cranberry production were all up substantially from 1986.

The largest quantity of raspberries ever grown in B.C. was harvested in 1987 -- a record 19.25 million kilograms, up from 11.25 million kilograms in 1986. The bulk of raspberry exports to Europe from the Pacific Northwest totalling 4.5 million kg was produced in British Columbia.

The raspberry certification program had a third successful year of operation. The program ensures greater availability of disease-free planting stock for the $25 million industry.

The first commercial harvest of kiwifruit yielded 23,000 kg. The first commercial harvest in two decades of gooseberries and red currants for fresh export took place in 1987.

Ministry staff examined and presented information to Vancouver Island growers on financial considerations in establishment of new plantings of raspberries, strawberries and blueberries. Microcomputer models for small holdings in these three commodities were developed to estimate cashflows, profitability and cost of production.

Vegetables

Vegetable producers' receipts rose two percent in 1987. Acreage and production were well below average for peas, beans, brocolli and cauliflower, however it was a good year for salad crops. Iceberg lettuce production was up approximately one percent from 1986 but excellent prices resulted in a 31 percent increase in crop value.

Surpluses in commercial potato markets throughout the Pacific Northwest, including large Alberta and Washington State crops caused markets for B.C. product to be very depressed.

The specialty mushroom industry produced 181,000 kilograms with an estimated value of $920,000. Ministry staff conducted a specialty mushroom seminar in co-operation

with B.C. Research and ARDSA. The 37 registrants participated in discussions on production techniques, budgeting, cost analysis and tax. As a result of this, several new operations have been established.

Without proper storage, seed potatoes can suffer moisture losses of 10 percent or more, resulting in an equivalent loss of returns to the grower. Moisture loss also increases the physiological age of seed potatoes resulting in a less vigorous and productive plant. Ministry staff presented information on improved storage for seed potatoes to growers at the Pemberton Seed Potato Growers annual meeting.

Most salad crops (celery, lettuce, cauliflower, cabbage and broccoli) are harvested and handled by hand in B.C. The Engineering Branch is developing a low-cost harvest aid which will reduce costs and improve quality. A model will be available for growers to test in 1988.

Cereals and Oilseeds

Grain and oilseed production in 1986-87 was about 373,000 tonnes from 196,000 hectares. Farm value of these crops decreased 21 percent to $34 million. The subsidy war between the United States and the European Common Market resulted in the lowest grain prices of the century in real terms. Barley markets were severely affected by record high world and U.S. stocks of major feed grains including corn.

Excessive rain in late summer caused difficulty in harvesting cereal crops. Ministry specialists demonstrated commercially-available floatation systems for use on grain swathers during wet weather. A half-track system mounted on a swather effectively overcame the effects of soft field conditions.

The ministry conducted 24 trials to test new crops, identify superior varieties and demonstrate improved management practices. For example, a new variety of barley outyielded the check variety by 28 percent in the Peace River region. Even at $50 per tonne and average yields, use of this variety could improve returns by $35 per acre.

On-farm demonstrations conducted by the ministry showed that the proper balance of nutrients can reduce fertilizer costs and increase yields for greater profits. In one test, a blend of nutrients that cost $14.33 per hectare resulted in greater yields than the traditional application which costs $17.96. The variable cost of production was reduced from $170 per tonne to $110.

B.C.'s pedigreed seed growers produced 2,265 hectares of cereal seed and 3,763 hectares of forage seed. All forage seed prices were strong due to the Conservation Reserve and Set-Aside programs in the United States. Ministry staff assisted the Fine Seeds Committee of the B.C. Grain Producers' Association with a technical bulletin and photographs promoting the use of creeping red fescue in the United States Conservation Reserve program.

Greenhouse Crops

Exports of greenhouse ornamental crops to the United States were valued at about $6.0 million. Exports of greenhouse vegetables amounted to $1.7 million, increasing 70 percent. These increases reflect a strong market demand for high-quality British Columbia products.

The greenhouse industry continued to expand in 1987. Value of production increased 26 percent to $59.8 million. The vegetable sector showed the strongest growth, increasing 23 percent over 1986 with sales of $19.4 million. The ornamental sector increased seven percent in sales to $40.4 million.

The Greenhouse Assistance Program was established in 1985 to encourage growers to adopt labour- and energy-saving technologies. In 1987-88, 78 contracts were approved

resulting in final payouts totalling $724,146. Total expenditure by greenhouse growers was $7.7 million, including grants. Every dollar contributed by the program resulted in an expenditure of $9.60 by the private sector. There was particular interest in automated seeding and potting machines. The program, which ended on March 31, 1988, paid out a total of $2.1 million over the three years, and played an important role in modernization of the B.C. greenhouse industry. The province now has some of the most modern greenhouse facilities in North America.

The ministry co-operated with the University of British Columbia in a biological pest control project to control crown and root rot in greenhouse tomatoes which can cause up to a 20 percent yield loss. The project demonstrated that using an antagonistic strain of the disease organism protected the plants and resulted in full production.

The ministry, Agriculture Canada and the private sector are continuing to investigate methods for biological control of thrips, a serious pest of greenhouse cucumbers. Thrips are responsible for an estimated five percent annual loss in revenues to the industry.

Two presentations on heating systems and greenhouse planning were made at the annual Northern Interior Greenhouse Growers' seminar in Prince George.

Ministry staff completed an analysis of the B.C. greenhouse industry which highlights the natural advantages of southern B.C.'s warm climate and identifies problems with product handling, comparative transportation and energy costs.

Nursery Crops

The nursery industry continued to expand with farm value rising to $30.1 million, an increase of 10 percent over 1986. Most of the increase was due to stronger markets, more favourable growing conditions, and improved management practices. More than 50 percent of stock was exported to prairie markets, the Pacific Northwest, Ontario and the Atlantic Provinces.

Pear trellis rust is a fungus disease affecting ornamental junipers as well as pear trees, which could threaten nursery production of junipers. In 1987, more than 42,000 pear trees were examined in the Lower Fraser Valley and Vancouver Island under the pear trellis rust control program. Twenty-eight out of 46 nurseries inspected were certified to ship junipers and/or pear trees out of coastal B.C.

Forage

Forage includes pasture, hay and silage, the primary feed for beef and dairy cattle, horses, sheep and goats. It also includes livestock feed consumed on the farm, forage sold to other livestock producers and forage exported as hay products. In 1987, there were 1.9 million tonnes of hay produced from 340,000 hectares, valued from $50 to $120 per tonne. Estimated total value was $170 million. The area planted to field corn was 11,200 hectares.

Ministry specialists conducted a number of field trials, demonstrations, competitions and seminars. A forage competition was established for cattle producers in the Central-Peace River region to encourage production of high-quality feed. Forty-four producers participated in the first competition.

Silage bagging equipment was demonstrated by ministry staff to more than 300 farmers at a field day in the Fraser Valley. The silage bag is a flexible low-cost alternative to the traditional storage methods of bunker and tower silos.

Effective development and management of wetland meadows can increase forage yields six-fold to 7.5 tonnes of hay per

hectare. Ministry staff have been investigating and demonstrating effective and economical methods of brush removal, drainage, irrigation, tillage and reseeding on wetland meadows. The Engineering Branch developed a plough for breaking the tough willow-bound sod found on wetland meadows.

Damage to forage crops by elk and deer was objectively estimated for the first time in 1987 and reported in a study conducted on ranches near Cranbrook. Hay yields on three ranches were reduced by 1.3 to 1.8 tonnes per hectare during spring and summer. The ministry will work with staff of the Ministry of Environment and Parks to find ways to reduce the damage.

Christmas Trees

Production of Christmas trees in native stands is one of the most promising enterprises in the Southern Interior region of the province. Most of the production and the largest commercial operations are located in the East Kootenay area.

In 1987, the crop was estimated at 600,000 trees valued at $1.5 million. Staff have been involved in projects to increase the quality and quantity of trees being produced. Five fertilizer and pruning demonstration sites have been established, and ministry staff assisted with the formation of a producer association and production of a newsletter.

Fish Industry Development

Aquaculture

Aquaculture production increased significantly in 1987 as many of the newer farms came into full production. Four species of finfish are being cultured -- chinook and coho salmon, rainbow trout and Atlantic salmon. Shellfish culture is almost exclusively based on the Pacific oyster. Abalone, mussels, clams, scallops, black cod, carp and marine plants are being cultured in lesser quantities or in commercial trials.

The aquaculture harvest was valued at $13.6 million in 1987, a substantial increase from $6.0 million in 1986. Shellfish production accounted for $3.1 million, finfish culture comprised $10.1 million, and freshwater trout culture was estimated at $.4 million.

At the end of 1984 there were approximately 10 salmon farms operating on the B.C. coast. By year end 1987, there were more than 118 salmon farms utilizing more than 575 hectares. This is a 44 percent increase in the number of farms and a 105 percent increase in the area used from the previous year.

The shellfish industry has 404 active sites using more than 1600 hectares of foreshore, a 16 percent increase from the same period last year. A majority of the new farms are expected to use off-bottom culture technology.

The aquaculture industry is producing one-tenth of the total fresh salmon sold by British Columbia. By 1990 it is expected that aquaculture production will exceed $133 million with more than 90 percent of that attributed to marine salmon and trout production.

During 1987 the Aquaculture Steering Committee implemented Cabinet direction on the recommendations of the Gillespie Inquiry on aquaculture. The ministry co-operated with other ministries and industry to identify threats to the environment which could affect industry development as well as other users of marine resources. More than a dozen investigations were undertaken on such issues as water quality, toxic compounds, sedimentation, and phytoplankton.

Fifty veterinarians attended aquaculture training courses sponsored by the ministry in co-operation with the Veterinary Medical Association. These courses ensure better diagnostic services for the aquaculture sector.

As well, the ministry organized workshops in conjunction with industry which brought together international experts to coordinate research into control and prevention of diseases. Courses were held for producers on disease diagnosis, fish health management, fish nutrition and the safe use of chemicals.

The best possible genetic stocks of salmon are needed to start a breeding program. A new chinook salmon broodstock program was initiated by the ministry in co-operation with industry and the federal government. Many different stocks of chinook salmon are being evaluated on 30 farms. The program will ensure an adequate supply of eggs from preferred strains of chinook salmon.

Twenty-two publications providing introductory, technical and market information for aquaculturists were written or updated. The Farmland Resources Branch worked with the Aquaculture and Commercial Fisheries Branch and the B.C. Assessment Authority to prepare a brochure outlining the property taxation system as it affects aquaculture operations in B.C. The brochure is designed to assist aquaculture operators who may benefit from farm classification of their leased land or water lots.

Staff of the Aquaculture and Commercial Fisheries Branch developed methods to remotely set oyster larvae which will reduce costs and increase the availability of oyster seed. Limited and unreliable supplies of wild oyster seed has constrained the growth of the oyster culture industry.

Damage to oyster farms by harvesters of clams caused considerable conflict between the two industries. To prevent the destruction of oysters while still allowing access to the clam fishery, an agreement was negotiatied with the Department of Fisheries and Oceans and the industry. Wild clam harvest is now prohibited on all marked oyster leases except in places and during times determined by the oyster farmer.

Future aquaculture development, particularly in the rapidly-growing salmon and trout sector, depends on ensuring that suitable areas remain available for aquaculture. The ministry prepared resource information maps of the biological and physical suitability for aquaculture of most of the south coast areas. Staff also worked closely with the Ministry of Forests and Lands to develop maps which identify areas of potential conflict between different segments of the industry and between industry and other resource users.

The ministry has had a major role in design and support of a plankton monitoring program which is expected to save the salmon farming industry millions of dollars. In the past two years plankton blooms have caused fish kills resulting in farm losses of more than $6 million. The monitoring program, maintained by the farmers, allows preventive action to be taken before major losses occur.

Ensuring a safe growing environment for the culture of aquatic stocks is an essential part of the orderly growth and development of the industry. To this end, more than 300 non-fisheries resource development referrals from other ministries and 177 aquaculture development plans for finfish, shellfish and marine plant aquaculture were reviewed. Thirty marine plant harvesting licences were issued, 81 of which were to provide kelp to the herring roe-on-kelp fishery; 583 permit-applications to harvest wild oysters were received for the 1987 calendar year and 396 were approved and issued.

Commercial Fisheries

The commercial fishing industry has enjoyed the fourth successive year of very strong market demand for seafood products. Total commercial fish harvest was 239,206 tonnes, up from 221,000 tonnes in 1986. The landed value rose to $414 million from approximately $402 million in 1986. The wholesale value, overall, decreased from

$767 million to $754 million. Herring, a highly variable fishery, increased significantly from 16,500 tonnes to 37,400 tonnes. A comparison of quantity landed, landed value and wholesale value for each major species group for 1986 and 1987 is shown in tables in this report.

In November 1987 a General Agreement on Tariffs and Trade (GATT) panel ruled that Canada's restrictions on the export of sockeye, pink salmon and roe herring were contrary to the GATT. Ministry staff worked with the Ministry of Economic Development to develop a provincial position in response to Canada's acceptance of the GATT panel ruling. The province is working with industry and federal government to develop alternative measures acceptable to GATT which would alleviate some of the effects of the GATT ruling.

An improvement in the international allocation of salmon for British Columbia fishermen was obtained under the new Canada/United States Salmon Treaty. A much higher share of salmon was obtained from the transboundary rivers in the Alaska Panhandle. The ministry developed a position with recommendations for higher allocations to British Columbia fishermen and for the use of enhancement as an inducement for an improved agreement.

In response to a request to the Provincial Government from the Minister of Fisheries and Oceans, the ministry reviewed proposals for a possible new role for the Province in the Salmonid Enhancement Program, Phase II.

In 1987, 258 processing licences, 463 fish buyers' and 181 fish vendors' licences were issued. Some 800 inspections of processing facilities and retail outlets were conducted during the year. Responsibility for inspection of processing plants was transferred to the Ministry of Health at the end of the year, however the licensing of processing facilities and the inspection of fish buyers and vendors remains the responsibility of the Ministry of Agriculture and Fisheries.

Research and development for new value-added seafood products and new processing technology has set the stage for production of a pharmaceutical grade cholesterol-reducing agent extracted from fish oils. Through the British Columbia Science Council support was provided for a computer-controlled decapitating device for salmon canning that promises to make more efficient use of raw product.

The comparative relationship between the numbers of sites and operations in fiscal year 1986/87 and 1987/88.

	1986		1987	
	Sites (#)	**Growers (#)**	**Sites (#)**	**Growers (#)**
Marine Finfish	97	82	173	114
Marine Shellfish	348	209	404	242
Marine Plants	4	1	5	3
TOTAL	**449**	**292**	**582**	**359**
Freshwater Finfish	142	142	156	156
GRAND TOTAL	**591**	**434**	**738**	**515**

QUANTITY AND VALUE OF B.C. FISH LANDINGS AND PRODUCTION BY SPECIES 1986 AND 1987

	1986			1987[6]		
	Landed Quantity (Tonnes)	Landed Value ($ mil.)	Wholesale Value ($ mil.)	Landed Quantity (Tonnes)	Landed Value ($ mil.)	Wholesale Value ($ mil.)
Salmon[1]	100,242	266	536	65,982	190	395
Herring[2]	16,491	46	88	37,433	114	186
Halibut[3]	5,389	24	31	5,534	29	38
Groundfish[4]	81,806	41	76	112,999	53	96
Shellfish	16,729	24	35	17,141	27	38
Other[5]	129	1	1	117	1	1
Total	**220,786**	**402**	**767**	**239,206**	**414**	**754**

Footnotes

1. Includes salmon roe. Wholesale value includes production derived from U.S. salmon.
2. Includes herring spawn on kelp.
3. Includes landings at U.S. ports.
4. Includes hake delivered to foreign vessels in co-operative fishing arrangements and "other fish" not elsewhere included.
5. Includes sturgeon, tuna, eulachons, smelt, anchovies, floating kelp and other fish.
6. Quantity data is preliminary; values are based on estimated prices

Sources:

B.C. Annual Fisheries Production Statistics - Ministry of Agriculture and Fisheries
Annual Summary of B.C. Catch Statistics - Canada, Department of Fisheries and Oceans.

Food Industry and Market Development

Marketing-related activities of the B.C. Ministry of Agriculture and Fisheries help the agriculture, fisheries and food industry to compete effectively in domestic and export markets.

Domestic marketing programs help increase producer and processor effectiveness in marketing management by compiling, publishing and analysing market data and making available other marketing information.

Export market development programs help producers and food processors increase their export marketing capabilities and find Pacific Rim or other international markets for agricultural products, technology and expertise. Ministry personnel assist in promotion of B.C. products in other countries and help to arrange contacts between buyers and sellers. The ministry hosts foreign trade delegations in B.C. and helps negotiate export contracts with foreign firms and governments.

Food industry and market development programs include financial incentives to improve facilities or develop new products. The programs are cost-shared with producers or food processors.

Provincial commodity marketing boards manage the supply and in some cases price of certain products. Supply management ensures consumers of consistent supply and reasonable prices, as well as ensuring a stable income for producers.

Market Development

The Marketing Branch sponsored a seminar entitled Purchasing Criteria of Major B.C. Institutions. An audience of 185 people representing food companies, brokers and distributors attended to learn how to gain a larger share of the institutional food market. B.C. food producers currently have a 22 percent share of the $520 million market, which includes the B.C. Ferry Corporation, health care and correctional facilities.

A B.C. Food Task Force was established by the Purchasing Commission and the ministry to determine food requirements of provincial institutions and B.C. products which would meet their needs. The ministry and the B.C. Chefs' Association co-operated in a survey which found opportunities for products not currently produced or processed in B.C.

Japan has a population of more than 100 million people -- a market with excellent potential for B.C. food products. The ministry hosted visits to B.C. of three Japanese buying missions in 1987-88. These missions have resulted in direct sales for B.C. food companies and major B.C. food marketing promotions in Japan, such as the Fuji Store promotion in Tokyo in August 1987. Japanese food buyers are returning to Vancouver to buy B.C. food products as a result of impressions gained at Food Pacific '86, the international food and beverage trade show held in Vancouver August 29 to September 2, 1986.

The Export Market Development Branch led industry leaders, technical experts and ministry representatives on several overseas missions including a mission to Aqua Nor '87, a major aquaculture trade show in Trondheim, Norway, and missions to Hong Kong and Thailand in December 1987.

As a result of ministry efforts in Thailand, an agreement was signed between the Thai Dairy Processing Group and ARDCORP Ltd. The agreement proposes shipment of 200 pregnant B.C. Holstein heifers to Thailand to improve that country's milk production.

A $4.5 million trade agreement was signed in October between Rim Pacific Import Inc. of British Columbia and the Import-Export Trade Bureau of Zheijiang Province in China as a result of a market development mission led by the Minister of Agriculture and Fisheries. The unique agreement provides for an exchange of goods for credit. Rim Pacific will buy $4.5 million worth of Chinese agricultural products; in return, Zheijiang Province will receive a $4.5 million line of credit for B.C. goods and services.

The ministry assisted in development of a logo for use on B.C. food products in domestic and export markets. The logo has the B.C. flag, the maple leaf and the words Food Product of British Columbia on it. A second logo, Processed Food Product of British Columbia - Canada, has been designed for use by B.C. food companies which process commodities produced outside the province.

Development Incentives

The Food Industry Development Program provides grants to encourage the development of new or improved food products, expansion of domestic and export markets and use of new or improved food processing technology.

Forty-three projects were approved under FIDP for grants totalling $547,208. One project assessed the effect of various handling and transportation methods on the shelf-life and quality of B.C. farmed salmon. An estimated 259 person-years of employment will result from the 43 projects. Applicants will invest $3.2 million in addition to that provided under the program.

The ARDSA Commodity Enhancement Program made funding available to food processors for projects which improved marketability of food products. Royal City Foods received funding for a cole crop processing line which handles frozen brocolli, zucchini, cabbage and cauliflower.

Financial Assistance

The financial assistance programs of the ministry reduce farm losses and income fluctuations caused by natural hazards and erratic market conditions, and provide funding to stimulate industry development or assist in adjustment to new and changing markets.

Development Incentives

The Agri-Food Regional Development Subsidiary Agreement (ARDSA) is a five-year $40 million program funded by the B.C. Ministry of Agriculture and Fisheries and Agriculture Canada under the terms of the Economic and Regional Development Agreement (ERDA).

The objectives of ARDSA are to stimulate growth and development, increase employment, enhance the viability and competitiveness of the agricultural production and food processing industry and conserve and develop land and water. The ARDS Agreement funds approved projects under three programs. To March 31, 1988, the ARDSA program has committed $15.6 million in contributions to 131 projects. These projects will generate an additional $23.5 million of private sector expenditures and are expected to create 514 new jobs by 1991. Refer to tables at the end of this section for detailed statistics.

The Guaranteed Loan Program makes commercial credit available to B.C. farmers by guaranteeing farm loans which have higher risk than commercial lenders are prepared to take. In 1987, 11 guarantees were approved totalling $1,113,000.

In the March 1987 budget speech, the government announced termination of the Partial Reimbursement Program effective at the end of the 1986 plan year. Since the

program started in 1974 more than $107 million has been paid to reduce farmers' interest costs. In 1987 approximately $5.8 million was paid on claims relating to the 1986 plan year.

The ALDA Program encourages land development for agricultural production. Loans up to a maximum of $50,000 may be used to pay for land clearing, irrigation and drainage on land classified as farmland under the Assessment Act.

In 1987-88 there were 213 contracts issued for a value of $2,826,859 and contracts were completed for total loans of $2,303,520. All available funds were not loaned during the year. Demand for credit, even at low interest rates, has fallen as B.C. farmers concentrate on improving their equity position in the face of declining land values and low profit margins. In addition, the demand for new agricultural land in the Peace River has slackened because of generous world grain supplies, resulting in a large decrease in land clearing financed through the program.

Risk Reduction

Farm Income Insurance reduces farm losses caused by low market returns and/or rapidly rising costs. In 1987, the Farm Income Insurance program was operated for 4,101 producers within nine commodity plans covering over 20 commodities.

In 1987/88, net indemnities declined significantly compared to the previous year. This was due to marked improvement in prices for beef, swine, and greenhouse vegetables. However, performance in the tree-fruit industry resulted in significant payments totalling over 90 percent of 1987/88 program indemnities.

Farm Income Insurance
Source and Use of Funds
For Year Ended March 31/88

Source of Funds	
(Gov't. Premiums)	- $12,075,856
Use of Funds	
(Net Indemnities to farmers)	- $13,050,121
Deficit	**($ 974,265)**

See the table at the end of this report for commodity program transactions.

Apple quantities increased 60 percent over 1986 while prices dropped 50 percent. Growers were compensated for lower returns by an advance payment of two cents per pound. Net indemnities were also paid on cherries, peaches, apricots and prunes because of increased production and low prices.

Calf, yearling and swine market returns exceeded cost of production for part of the year, resulting in low or no payouts. Payments were made on beef cattle in the finishing sector. Processing strawberry volumes increased 30 percent over the previous year; lower prices combined with higher production costs resulted in a payment to growers of $19.36 per ton.

The Crop Insurance Program stabilizes farm income when natural perils cause crop losses. Crop Insurance premiums are shared equally between the participant and the federal government while the provincial government delivers the program and provides funding for administration costs.

Insurance was offered on 27 commodities in 1987-88. Claims were paid for losses in vegetables, forage and honey crops due to drought and in grain and berries due to excess moisture. Freezing caused losses in

grapes while hail was a major contributor to losses in tree fruits. In 1987, 2,734 farmers insured crops for coverage totalling $87.2 million. Premiums of $10.1 million exceeded indemnities by $2.9 million.

In 1987 a Tripartite Stabilization Program was established for apples. British Columbia, Nova Scotia, New Brunswick, Quebec and Ontario are participating in the program with producers and the federal government.

British Columbia has 1,564 out of a total of 2,505 participants. B.C. producers, the province and the federal government each contributed $1.03 million in premiums on the 1987 crop. The agreement calls for an analysis of federal and provincial programs for apple producers, with the intent of attaining equitable levels of support for apple producers across Canada.

Other tripartite plans under consideration for British Columbia are red meats, honey, sour cherries and yellow onions.

NOTE: Tables for Financial Program transactions are included at the end of this document.

Resource Sustainability and Development

The continued development of agriculture and fisheries as an economic factor in the provincial economy depends on development of social and resource management strategies that will result in the long-term sustainability of the industry. Initiatives of several branches in the ministry are directed at this goal.

Only four percent of the land in British Columbia is suitable for agriculture, and much of it is in demand for other uses. Resource sustainability and development programs and regulations of the ministry conserve the agricultural land base in British Columbia; ensure that proposed or current uses of land for purposes other than agriculture are compatible with agriculture and food production; encourage sound use and development of agricultural resources; and assist industry by developing guidelines for the intensification of agriculture.

Similar programs exist to monitor uses of foreshore in the development of aquaculture and commercial fishing in B.C. Other provincial ministries and federal government departments are also involved.

The Farmland Resources Branch works with municipal governments to resolve rural-urban conflicts, particularly where there are many rural residents in or near farming areas in the Fraser and Okanagan Valleys. The branch encourages local governments to establish fair bylaws so that agriculture remains competitive and continues to grow while impacts on urban residents are minimized.

B.C.'s foreshore and saltwater resources are monitored carefully to ensure aquaculture and commercial fishing can develop in harmony with other recreational and industrial uses. The ministry is the lead agency for the province and works with other provincial ministries and federal government departments in fish industry development.

The ministry's ARDA, Agricultural Finance, Engineering, Soils, and Field Crops branches also have programs which are directed at maintaining and improving B.C.'s soil and water resources.

Land and Water Resources

The Soil, Feed and Tissue Testing Laboratory analyzed soils, feed and plant tissue samples for projects conducted by field staff. The lab also analyzed samples submitted by producers and provided recommendations

on fertilizer practices. The laboratory is continuing to offer the same service under private ownership following purchase of the operation by a group of employees at year-end.

In 1987 the Farmland Resources Branch continued development of a provincial agricultural land and water resources strategy. The strategy will be completed in 1989.

The Agricultural Land Commission is an independent Crown Corporation responsible for the administration of the Agricultural Land Commission Act and the Soil Conservation Act. The mandate of the commission is to preserve agricultural land and to encourage the establishment and maintenance of farms, and the use of land compatible with agricultural purposes. The act enables the commission to designate an Agricultural Land Reserve within which land use is agricultural or compatible with agriculture.

In 1987, government directed that a review of the Agricultural Land Reserve Program be undertaken. The review, in which ministry staff are participating, is focussing on an evaluation of the objectives of the Agricultural Land Commission, the administration of commission activities, and the criteria used by the commission in its review of applications. The regional Ministers of State have also been asked to review the role of the Agricultural Land Commission in their regions to determine whether its procedures are appropriate given that land use requirements and needs differ throughout the province.

Staff conducted 25 site investigations for the provincial Agricultural Land Commission and prepared comments for the commission on 69 applications from landowners in the Central Okanagan Regional District and the City of Kelowna.

Background information was prepared to assist the Minister, the Cabinet Committee on Environment and Land Use, and Cabinet in the review of private appeals and local government applications regarding the Agricultural Land Reserve.

Staff also reviewed a number of government applications which proceeded to Cabinet for decision.

Ministry staff examined options for possible legislation to protect farmers from nuisance legal claims launched by urban residents bothered by odours, noise and other practices associated with normal agricultural practices. A review of approaches in other provinces and areas of the world was carried out.

In 1987-88 the Farmland Resources Branch administered a portfolio of 125 properties comprising 4,741 hectares of land for private farm development under policies of the Agricultural Land Commission. Refer to tables at the end of this section for detailed statistics. The properties administered by the Property Management Program were transferred to the Ministry of Forests and Lands effective March 31, 1988.

Revenues from rental for 1987-88 increased by 14 percent from the previous fiscal year to $579,842.66. The program succeeded in encouraging private sector development of vacant farmlands acquired by the Crown. In 1987 two properties were sold for $265,500.

The total value of capital investment in intensive agricultural operations (eg: swine, poultry, vegetable, nursery, etc.) is an estimated $1.44 billion, with annual sales of $586 million. The Farmland Resources Branch worked with the Ministry of Municipal Affairs to develop a proposal concerning a section of the Municipal Act pertaining to intensive agriculture. Under current legislation the Minister of Agriculture and Fisheries has the power to make regulations governing intensive agriculture use to prevent local government from implementing severely restrictive bylaws or prohibition of intensive agriculture. However, no regulations had been put in place as of year-end.

Ministry staff provided comments on several development proposals throughout the province, including a motorsport complex in Chilliwack. Nearly half the proposed site is used by a dairy operation generating sales of more than $400,000 annually. A review by the Minister of State for the Lower Mainland/ Southwest Region rejected the site for the proposed complex.

The ARDSA Resource Development Program provides grants to improve the productive capability and use of soil, land and water resources and increase their potential to produce higher value crops and livestock. The program funded a number of drainage projects including dredging of the Sumas River to provide better drainage from adjoining lands. A $683,000 project by the District of Pitt Meadows received $512,325 to improve drainage on 235 hectares of good quality land. The project will increase forage, blueberry, nursery and Christmas tree production and bring 32 hectares of idle land into blueberry and forage production.

ARDSA irrigation projects included funding for rebuilding the Vermilion Irrigation District's flume, the last operational above-ground flume in B.C. It is used for irrigation of forage, vegetables and orchards.

In co-operation with Agriculture Canada, the Soils Branch initiated a research and demonstration project to compare conventional, minimum and zero tillage systems for barley production in the Peace River region. Preliminary results indicate that the zero tillage system significantly reduced soil erosion without reducing crop yield.

Staff supervised a DATE project at Osoyoos which demonstrates the use of sewage effluent as a source of irrigation water for the production of tree fruits, grapes and vegetables. In many cases crop yields were greater than those obtained by use of well water.

It is estimated that elimination of water problems in the Fraser Valley would result in an annual increase in farm receipts of 20 percent. Work continued on the long-term Boundary Bay Water Management Program, operated by the ministry in co-operation with Agriculture Canada and the University of British Columbia. The project is evaluating the effects of drainage and subirrigation on crop yields and soil characteristics. Yields of grass forage have been doubled by a combination of drainage and subirrigation.

Rangeland

In 1987, the province's Crown rangelands provided grazing for 210,000 cows and calves. These rangelands provided 889,000 animal unit months of pasture -- a decline of 5,000 AUMs from 1986 and 32,000 from 1985. (An animal unit month is the amount of forage needed to feed one mature cow with calf at foot for one month -- 345 to 355 kg). The decrease was due to drought, competition from other range uses and forest regeneration.

Improved productivity of rangeland is a key to growth of the beef cattle industry. The Rattlesnake Hill range development project near Cache Creek has transformed a virtually unusable range area into a productive and valuable resource for fall and spring grazing.

Demonstrations at the site included seeding, fertilization, fencing and a photovoltaic system for pumping livestock water. In 1987 the unit produced forage at a critical period when other ranges were dormant. Based on work done at the site, the ministry audio-visual unit prepared a film on development of a photovoltaic system for pumping water in remote range locations.

Weed Control

Crop losses in British Columbia due to weeds exceed $41 million and costs of control are about $8 million annually. To create public awareness of these costs and to assist local governments in enforcement of the Weed Control Act, the ministry provided $299,647 in grants-in-aid of local weed control programs. These grants triggered additional expenditures of $642,500 by private agencies. In addition, a grant of $80,000 was given the B.C. Cattlemen's Association to assist local livestock producers with knapweed spraying. Knapweed poses a continuing threat to B.C. rangelands.

The ministry has more than 500 sites where biological agents are used to control 15 weed species. As a result of ministry control programs, knapweed is declining sharply at mid-elevation rangeland sites.

Bulletins and a slide-tape show were prepared to help producers identify noxious weeds on range.

Plant Health, Animal Health and Product Quality

Regulations are established to maintain food quality through standards governing animal and plant health as well as grades of commodities and food products. Some programs are carried out with other ministries or the federal government. Programs pertaining to specific commodities are referred to in the commodity review segment earlier in this report.

The ministry pest control program helps ensure that food products and the environment are free of harmful pesticide residues. The use of biological and cultural pest control methods is encouraged, however pesticides continue to be essential to the production of many B.C. crops.

The strawberry, cranberry and pear industries suffered significant economic losses due to disease and insect damage. Three provisionary (emergency) pesticide registration requests submitted in 1987 were denied by Agriculture Canada. This illustrated the need for expedient approval of registration for certain pesticides available in the U.S. and elsewhere. Minor use registration requests were submitted for a variety of crops including greenhouse peppers, cranberries and tree fruits.

B.C. produce is monitored for pesticide residues in order to protect the public and indicate possible pesticide application problems. Only a few of the samples analyzed in 1987 contained pesticide residues above the limits established by Health and Welfare Canada. Corrective action was taken to prevent future occurrences. The samples are analyzed at the Ministry of Environment and Parks laboratory in Vancouver.

Courses and presentations about the proper use of pesticides were scheduled throughout the province for a number of farm groups. Development of a home study course on pesticides for B.C. farmers was begun in 1987.

The provincial plant diagnostic clinic in Cloverdale identifies and recommends controls for plant diseases. In 1987, 427 samples were submitted by commercial growers, agricultural businesses and staff. The tomato spotted wilt virus, which can affect more than 150 plant species, was identified for the first time in British Columbia.

Bacterial blight of geraniums caused an estimated loss in 1987 of $300,000 to $400,000, about 10 percent of the value of the greenhouse geranium crop. Ministry staff worked with growers and suppliers on control procedures for these diseases.

Gypsy moth infestations were found in 1987 at Parksville, Colwood and Kelowna. The gypsy moth is a serious pest of forest and shade trees as well as a potential pest of fruit tree and nursery stock. Ministry staff have been actively involved with Agriculture Canada, the B.C. Forest Service and the Canadian Forestry Service in preventing the establishment of this pest. Staff will work with Agriculture Canada on an eradication program in the summer of 1988 and on continuing surveillance. Public meetings were held in February to advise residents in the affected areas of the proposed eradication program.

The Animal Industry Branch monitors and helps control the spread of animal diseases in the province and encourages disease prevention, good management and nutrition.

The branch licenses stores selling veterinary drugs, examines and licenses their dispensers and controls the drugs and vaccines they sell. It also licenses stores mixing or selling medicated feed. Sales, saleyard operators and auctioneers are licensed as a means of monitoring or tracing animals for disease control.

An inspection service for meat and meat products is provided in designated areas and in addition, products are inspected on a referral basis from all over the province.

The ministry provides a laboratory diagnostic service for veterinarians, livestock and poultry owners and gives advice on the treatment, control and prevention of disease and poor production.

The Dairy and Food Laboratory provides qualitative and compositional analysis and food development research services to the industry. The qualitative analysis is a quality control program for testing farm tank milk, finished milk products and other foods such as fruit juices.

Compositional analysis determines butterfat, protein and lactose content in milk to provide the Milk Board with data for calculating producer payments. Data is also provided to the Dairy Herd Improvement and Record of Performance programs and the Canadian Goat Society.

Executive, Central and Support Services

Ministry support services and administration provide a framework for program development and ministry operations.

Management Services includes financial operations, financial planning, and the provision of audit, facilities and computer services to the ministry.

A major project in 1987-88 was the development of a data management system integrating financial and statistical data from several program areas.

The Policy Analysis and Co-ordination Branch assisted the deputy and minister in development of policies and programs to help ensure the sound development of the agriculture, fisheries and food sector. In addition to studies on the greenhouse and tree fruit industries staff carried out an economic evaluation of the Farm Income Insurance program.

Ministry policy analysts prepared documents on agriculture and fisheries issues for discussion at the annual Premiers' Conference, Western Premiers' Conference and interprovincial conference of ministers and deputy ministers of agriculture in July 1987 in Quebec City. At the Quebec meeting, an agreement was reached which could facilitate eventual participation of British Columbia in national tripartite price stabilization schemes.

The Statistics and Quantitative Analysis Unit assisted federal and provincial data collectors, especially Statistics Canada, in various surveys and on the mid-year and annual agricultural outlook. Support was also provided to Statistics Canada in the intercensal revision process in which annual estimates since 1981 for various data series are revised and realigned with the new 1986 Agricultural Census bench marks.

The unit issued several publications following the release of 1986 Census data highlighting aspects of interest to industry users. Futher, the unit directed a study by a consultant on the structural characteristics of B.C. agriculture based on special tabulations of the 1986 Census data.

The Rural Organizations and Services Branch administers a variety of programs which contribute to the growth and development of the agricultural industry. Funding supports the activities of 4-H, agricultural fairs and exhibitions, Farmers' and Women's Institutes, agricultural employment and International Agricultural Exchange programs.

Membership in a 4-H club gives young people the opportunity to participate in a project, learn public speaking, travel and make decisions and co-operate in the running of their own organization. In 1987-88 more than 40 senior 4-H members took part in a wide variety of national and international travel and exchange programs. Forty-one Japanese young people were guests of 4-H families in B.C.

The branch is the co-ordinating office for the International Agricultural Exchange Association program in B.C. which provides young people from participating countries with the opportunity to gain agricultural educational experience in another country. In 1987 B.C. was host for 17 IAEA participants from New Zealand, Australia and Europe, while six young British Columbians travelled to other countries.

The Rural Organizations and Services Branch co-ordinates the Demonstration of Agricultural Technology and Economics program (DATE). DATE provides funding for ministry staff-supervised demonstration projects. Some 37 projects received funding of $187,943 to demonstrate technologies throughout the province.

Grants of $186,000 to 48 agricultural fairs and exhibitions are administered through the Rural Organizations and Services Branch. In addition, the branch administers the grants made by the Ministry to societies such as the Veterinary Infectious Disease Organization and the Society for the Prevention of Cruelty to Animals.

In 1987-88 $200,000 was paid in grants to 23 non-government organizations to carry out agricultural development work in developing countries. Included in projects funded were a village water supply in Kenya, a grant for Mozambique drought relief, a dairy cattle project in India and a food production and nutrition project in Bolivia.

The Information Services Branch is the communications arm of the ministry. In 1987-88 the branch assisted the ministry executive in developing and articulating policy as well as creating public awareness of the agriculture, fisheries and food sector. The branch also assisted in preparation of materials for use by staff in educational programs.

To improve media awareness of agricultural developments, a tip sheet was prepared and distributed on a bi-weekly basis for several months. Each tip sheet focussed on an individual or company which had successfully adopted a new technique in production or marketing of an agricultural product.

Farm Income Insurance
Source and Use of Funds
For Year Ended March 31, 1988

SOURCE OF FUNDS

Government Premiums

Blueberry	$ 39,787
Swine	1,817,547
Sheep	62,786
Potatoes - Early	56,347
- 2nd Early	187,534
- Late	700,586
- Processing	73,494
Tree Fruit - Apples	5,948,737
- Pears	396,945
- Cherries	61,243
- Peaches	907,268
- Apricots	16,692
- Prunes	254,975
Beef - Calf	735,742
- Yearlings	170,624
- Finishings	406,942
Greenhouse - Tomatoes	(341,476)
- W.S. Cukes	(8,992)
- L.E. Cukes	(107,860)
Processing Strawberries	292,402
Processing Vegs.- Peas	17,845
- Beans	42,923
- Corn	343,765
TOTAL	**$ 12,075,856**

USE OF FUNDS

Net Indemnities to farmers:

Blueberry	$ (39,787)
Swine	81,925
Sheep	47,715
Potatoes - Early	52,533
- 2nd Early	176,636
- Late	884,796
- Processing	151,495
Tree Fruit - Apples	10,126,668
- Pears	1,407,770
- Cherries	(68,197)
- Peaches	1,278,056
- Apricots	(2,353)
- Prunes	208,808
Beef - Calf	(944,534)
- Yearlings	(336,932)
- Finishing	323,369
Greenhouse - Tomatoes	(535,182)
- W.S. Cukes	100,008
- L.E. Cukes	(311,513)
Processing Strawberries	58,164
Processing Vegs. - Peas	32,448
- Beans	31,106
- Corn	327,122
TOTAL	**$ 13,050,121**
DEFICIT	**$ (974,265)**

SUMMARY OF CROP INSURANCE CLAIMS FOR 1987 CROP YEAR

PLAN	INSUREDS	CLAIMANTS	CLAIMANTS % OF INSUREDS	MAJOR PERILS
Tree Fruit	1,530	1014	66	Hail
Grain	616	172	28	Excessive Moisture
Vegetable	60	25	42	Drought
Berry	288	128	44	Excessive moisture
Grape	126	9	7	Freeze
Forage	105	96	91	Drought
Honey	8	4	50	Drought
Livestock Feed Security	1	0	0	
TOTALS	**2,734**	**1,448**	**53%**	

SUMMARY OF CROP INSURANCE EXPERIENCE FOR 1987 CROP YEAR

PLAN	COVERAGE	PREMIUM	INDEMNITY
Tree Fruit	$51,791,770	$5,156,490	$5,251,940
Grain	7,774,851	1,845,433	430,847
Vegetable	3,892,142	611,155	160,155
Berry	14,843,348	1,595,596	898,930
Grape	7,589,362	587,430	19,728
Forage	1,203,114	252,797	375,064
Honey	81,295	8,130	17,011
Livestock Feed Security	1,680	218	0
TOTALS	**$87,177,562**	**$10,057,249**	**$7,153,675**

GREENHOUSE ASSISTANCE PROGRAM

Summary of Program

Year	No. of Operators	Expenditure by Industry	Eligible for Grant	Grant
1985/86	28	$ 3,540,731	$1,837,044	$ 468,623
1986/87	67	5,882,357	4,044,173	916,067
1987/88	71	7,749,156	3,046,894	724,146
Totals	**	**$17,172,244**	**$8,928,111**	**$2,174,210**

* Several operators applied in more than one year. Actual number of individual operators is 112.

B.C. FEED GRAIN MARKET DEVELOPMENT PROGRAM

REGISTRANTS

	Producers	Producer/Feeders	Feeders
South Coastal	10	7	203
Cariboo	0	4	33
Okanagan/Kootenay	33	36	26
Central	22	74	59
Peace River	463	212	60
	528	333	381

Total Registrants = 1,242

WORK DONE UNDER A.L.D.A.

APRIL 1, 1987 - MARCH 31, 1988

		CLEARED		BROKEN			ORCHARD		
AREA	ACRES	AMOUNT	ACRES	AMOUNT	IRRIGATION	DRAINAGE	RENOVATION	OTHER	TOTAL
Abbotsford	40	61,877.	12	1,200.	255,581.	109,820.	-	148,401.	576,879.
Chilliwack	35	17,308.	35	3,360.	43,437.	14,807.	-	73,653.	152,565.
Courtenay	-	-	-	-	2,793.	-	-	27,532.	30,325.
Cranbrook	25	2,833.	-	-	22,936.	-	-	-	25,769.
Creston	-	-	-	-	-	48,084.	-	-	48,084.
Dawson Creek	100	7,000.	255	10,125.	-	-	-	-	17,125.
Duncan	65	51,406.	15	8,250.	30,801.	103,136.	-	147,735.	341,328.
Fort St. John	495	47,918.	50	5,550.	-	-	-	-	53,468.
Kamloops	-	-	100	35,000.	62,446.	-	-	10,389.	107,835.
Oliver	27	11,545.	26	4,455.	78,690.	-	178,736.	5,936.	279,362.
Prince George	40	16,000.	39	3,900.	-	-	-	15,013.	34,913.
Quesnel	343	46,909.	73	7,763.	63,900.	-	-	-	118,572.
Salmon Arm	21	9,880.	5	750.	-	-	-	24,335.	34,965.
Smithers	40	10,000.	40	6,000.	33,560.	-	-	4,800.	54,360.
Surrey	-	-	-	-	-	-	-	-	-
Vanderhoof	280	24,715.	190	12,051.	13,583.	-	-	11,339.	61,688.
Vernon	-	-	-	-	241,403.	-	13,962.	9,630.	264,995.
Williams Lake	252	30,905.	237	13,550.	47,948.	-	-	8,884.	101,287.
TOTALS	1743	338,296.	1077	111,954.	897,078.	275,847.	192,698.	487,847.	2,303,520.

WORK DONE UNDER A.L.D.A.

APRIL 1, 1987 - MARCH 31, 1988

AREA	CLEARED ACRES	CLEARED AMOUNT	BROKEN ACRES	BROKEN AMOUNT	IRRIGATION	DRAINAGE	ORCHARD RENOVATION	OTHER	TOTAL
SOUTH COASTAL	140	130,591.	62	12,810.	332,612.	227,763.	-	397,321.	1,101,097.
THOMPSON CARIBOO	252	30,905.	337	48,550.	110,394.	-	-	19,273.	209,122.
OKANAGAN KOOTENAY	73	24,258.	31	5,205.	343,029.	48,084.	192,698.	39,901.	653,175.
CENTRAL/ PEACE RIVER	1,278	152,542.	647	47,389.	111,043.	-	-	31,152.	340,126.
TOTALS	**1,743.**	**338,296.**	**1,077.**	**111,954.**	**897,078.**	**275,847.**	**192,698.**	**487,847.**	**2,303,520.**

Agricultural Land Development Assistance Program

District Commodity Summary

Applications April 1, 1987 to March 31, 1988
(Dollar amounts shown in thousands)

Districts	Dairy	Beef	Sheep	Grain Hay	Berries	Poult.	Vegs.	Orch. Vine Yard	Mixed	Swine	Sundry (Green-houses)	Fish Farms	Total No. Applic.	Totals
Abbotsford	$282	$15	$	$	$141	$50	$23	$10	$106	$50	$102	$	31	$779.
Chilliwack	64								9		21		8	94.
Courtenay							23						1	23.
Cranbrook		26											1	26.
Creston														00
Dawson Creek				34					31				3	65.
Duncan	199				6	32	6	8	45	45			15	341.
Fort St. John		30		100									4	130.
Kamloops	24	56	26	36					72	7	35		13	256.
Oliver		72						302	10				22	384.
Prince George		37		8									2	45.
Quesnel	50	102							101				9	253.
Salmon Arm	35	25		6									4	66.
Smithers	16	31		59									6	106.
Surrey													0	0
Vanderhoof	17	80							19				7	116.
Vernon	42	83		20			10	320	25	12			26	512.
Williams Lake		192	26	39					50				13	307.
TOTALS	**$729**	**$749**	**$52**	**$302**	**$147**	**$82**	**$62**	**$640**	**$468**	**$114**	**$158**	**0**	**165**	**$3,503.**

ORCHARD RENOVATION PROGRAM

Total Applications Received	36
Total $ Amount	640,319.
Total Contracts Issued	69
Total $ Amount	628,781.

NOTE: The Column Orchard and Vineyard includes Regular A.L.D.A. plus the Orchard Renovation Program.

AGRICULTURAL LAND DEVELOPMENT PROGRAM

Summary & Comparison 1986/7 - 1987/8

(FISCAL YEAR)

	No.	1986/7	No.	1987/8
Total Applications Received	185	$ 3,138,912	165	$ 3,503,977.
Total Contracts Issued	203	$ 2,445,625.	213	$ 2,876,858.
Total Expenditures		$ 2,035,951.69		$ 2,303,519.57
Total Contracts Outstanding		$ 843,039.25		$ 1,217,278.41
		$ 2,878,990.94		$ 3,520,797.98
TOTAL LOAN PAYMENTS RECEIVED		$ 3,510,452.		$ 3,506,479.

	1986/7		1987/8	
	No.	Amount	No.	Amount
Total Accounts as at MARCH 31	2487	$16,592,925.	2435	$16,077,215.
TOTAL Number of Delinquent	252	$ 404,385.	216	$ 341,647.
TRANSFERRED TO TAXES	32	$ 390,401.	22	$ 275,701.

FARM PRODUCT INDUSTRY ACT
GUARANTEES AND LOANS OUTSTANDING

GUARANTEES	March 31, 1988
Victoria Farm Meats Services Ltd.	$ 150,000
McLean & Fitzpatrick Ltd.	1,000,000
*Shergar Enterprises Ltd.	1,600,000
	$2,750,000
Loans	
Hodgson Bee Supplies Ltd.	$ 24,000
Ra-Bitco Farms Ltd.	110,000
	$ 134,000
TOTAL	$2,884,000

*** Under negotiation prior to March 31, 1987**

AGRICULTURAL CREDIT ACT
PARTIAL INTEREST REIMBURSEMENT PROGRAM
DISTRIBUTION OF PAYMENTS BY REGION

REGION	1986* %	1974-1985 %
South Coastal	60.1	53.2
Okanagan-Kootenay	21.8	20.7
Peace River	6.7	9.6
Thompson-Cariboo	6.7	10.7
Central	4.7	5.8

***Payouts made in 1987 on 1986 program**

AGRICULTURAL CREDIT ACT
PARTIAL INTEREST REIMBURSEMENT PROGRAM
DISTRIBUTION OF PAYMENTS BY ENTERPRISE

ENTERPRISE	1986 %	$000	1974-1985 %	$000
Dairy	34.9	2,038	28.8	30,909
Beef	14.3	836	21.6	23,088
Poultry	10.8	631	11.2	11,980
Orchards & Vineyards	8.3	486	6.	6,435
Sundry*	9.6	562	7.5	8,100
Berries	6.2	362	1.7	1,803
Swine	3.9	228	3.3	3,799
Mixed	4.4	257	10.8	11,553
Vegetables	3.2	187	3.5	3,709
Sheep	.3	18	.3	349
TOTAL	**100.00**	**5,845**	**100.00**	**107,362**

***The mink category, used in 1974-1982 has been incorporated into the sundry category.**

AGRICULTURAL CREDIT ACT GUARANTEED LOAN PROGRAM
ACTIVE GUARANTEES, MARCH 31, 1988, BY REGION

REGION	1974 - 1986 inclusive No.	$000	1987 No.	$000	Total No.	$000
South Coastal	28	3,370	9	1,078	37	4,448
Thompson-Cariboo	1	65	0	0	1	65
Okanagan-Kootenay	5	584	2	35	7	619
Central	1	17	0	0	1	17
Peace River	0	0	0	0	0	0
TOTAL	**35**	**4,036**	**11**	**1,113**	**46**	**5,149**

AGRICULTURAL CREDIT ACT

GUARANTEED LOAN PROGRAM

ACTIVE GUARANTEES, MARCH 31, 1988, BY ENTERPRISE

	1974 - 1986 inclusive		1987		Total	
ENTERPRISE	**No.**	**$000**	**No.**	**$000**	**No.**	**$000**
Dairy	11	1,374	1	41	12	1,415
Beef	2	82	0	0	2	82
Grain & Forage	0	0	0	0	0	0
Poultry	2	234	0	0	2	234
Vegetables	9	1,261	2	58	11	1,319
Orchards/Vineyards	2	325	0	0	2	325
Mixed	1	17	0	0	1	17
Swine	4	238	2	250	6	488
Sundry	3	476	5	484	8	960
Fish	1	29	1	280	2	309
TOTAL	**35**	**4,036**	**11**	**1,113**	**46**	**5,149**

COMMODITY SUMMARY

ARDSA PROGRAM APPROVED PROJECTS AS OF MARCH 31, 1988

COMMODITY	NO. OF PROJECTS	TOTAL PROJECT	FED/PROV SHAREABLE
	COST $	COST $	COST $
Beef	7	5,066,059	1,743,526
Dairy	1	34,320	19,570
Swine	5	467,888	391,886
Poultry	3	51,750	34,500
Honey/Bees	5	660,215	231,025
Tree Fruits	18	5,411,247	1,898,261
Soft Fruits	10	6,066,795	1,152,315
Greenhouse Vegetables	3	1,386,537	331,021
Field Vegetables	9	7,485,439	1,379,073
Mushrooms	2	25,620	15,640
Forages	10	477,349	173,426
Cereals, Oilseeds & Seeds	7	4,017,014	1,913,431
Mixed General, Non-Commodity Specific	51	7,943,654	5,421,877
Total ARDSA Program	**131**	**39,093,887**	**14,705,551**

***NOTE: This table doesn't include projects funded and determined unilaterally by either the Federal or ProvincialGovernment.**

ARDSA PROGRAM
EXPENDITURES BY COMMODITY

Commodity Code	Commodity Name	1985/86	1986/87	1987/88
01	Dairy		$9,000.00	$29,501.51
02	Poultry		21,060.54	
03	Beef		12,236.33	482,074.23
04	Hogs		12,616.00	78,011.00
05	Honey/Bees		76,890.80	
06	Tree Fruits		82,384.96	242,345.45
07	Soft Fruits		422,950.27	415,080.92
08	Nuts		49,515.56	
09	Greenhouse		221,359.51	7,003.64
10	Field Vegetables		14,242.00	24,256.68
12	Cereals		266,623.44	308,810.67
13	Mushrooms		963.55	
14	Fur		1,390.51	
99	General, mixed, non-specific	39,426.87	403,493.96	562,260.24
	TOTAL	**39,426.67**	**1,650,780.20**	**2,376,860.58**

ARDSA PROGRAM EXPENDITURES
BY ECONOMIC DEVELOPMENT REGION

Region Code	Region Name	1985/86	1986/87	1987/88
01	Vancouver Island/Coast		57,581.69	87,047.29
02	Mainland/Southwest		636,269.20	458,535.45
03	Okanagan		471,930.95	764,566.41
04	Kootenay		103,554.61	136,851.74
05	Cariboo		2,888.37	
06	North Coast			
07	Nechako			
08	Peace River		266,623.44	291,668.67
99	General, mixed , non-specific	39,426.87	114,820.31	635,302.65
	TOTAL	**39,426.87**	**1,650,780.20**	**2,376,850.58**

Ministry Organizations and Finances

Expenditures

Ministry expenditures for the 1987-88 fiscal year were $73,562,841. Approximate breakdown by administrative unit is shown in adjacent tables.

ITEM	1987-88
Voted Expenditures:	
Minister's office	$ 229,880
Ministry Operations	
Admin, Planning & Marketing	9,685,587
Ag Marketing & Food Ind. Dev.	1,543,507
Aquac. & Commercial Fisheries	2,626,431
Field Operations	12,011,340
Financial Assistance Programs	19,808,806
Milk Board	367,872
Prov. Agric. Land Commission	1,116,013
Agric.-Food Regional Dev. Subsidiary Agree. (ERDA)	2,502,983
Total Voted Expenditures	**49,892,419**
Special Accounts:	
Agricultural Land Development	2,303,520
Crop Insurance Stabilization	7,731,228
Farm Products Ind. Improvement	257,979
Livestock Protection	13,491
Farm Income Insurance	25,125,976
-Less Transfer from Voted Exp.	(12,075,885)
Total Special Accounts Expenditures	**23,356,309**
Statutory Expenditures:	
Cattle Horn Act (Chpt. 44, Sec. 7)	16,014
Financial Administration Act (Sec. 56)	68,219
Total Statutory Expenditures	**84,233**
Total Consolidated Revenue Fund Expenditures	**$73,562,841**

Financial Statements

The financial statements in this report have been prepared by management in accordance with accounting policies adopted by the Province of British Columbia. Management is responsible for the accuracy, integrity and objectivity of the information in these statements. Management maintains extensive internal accounting controls to ensure that transactions are completely and accurately recorded on a timely basis, are properly approved and result in reliable financial statements.

These statements are incorporated in the combined financial statements of the province, which are examined by the auditor general. The auditor general expresses an opinion as to whether the combined financial statements present fairly the financial position, operating results and changes in financial position of the Government of British Columbia in conformity with the stated accounting policies. This opinion is contained in the Auditor's Report, which is included in the Public Accounts presented to the Legislative Assembly.

Ministry Staffing

In 1987-88 approximately 50 percent of ministry staff worked in Field Operations, about 20 percent in Financial Assistance divisions, and five percent in Aquaculture and Commercial Fisheries. Remaining staff were involved in administration, marketing and other support services.

During the year, the ministry classification committee reviewed some 44 positions which resulted in 25 reclassifications. As well, a review of more than 50 agricultural officers was completed.

In 1987-88 ministry staffing was set at 496 full-time equivalents (FTEs) - approximately 330 members of the B.C. Government Employees' Union, 110 members of the Professional Employees' Association and 56 staff excluded from union membership, including managers. There were 115 appointments made: 47 regular and 68 auxiliary.

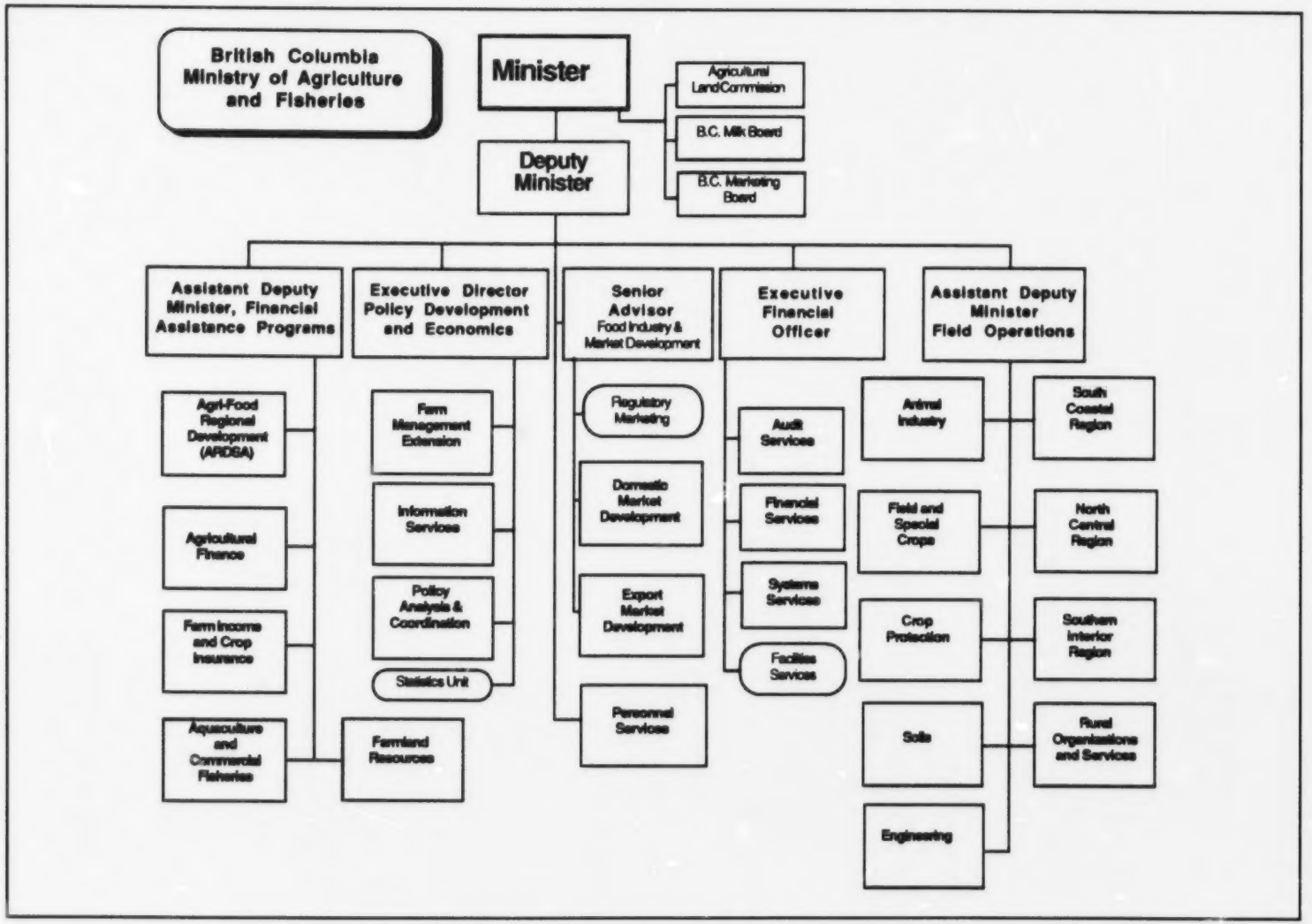
Organizational Changes

In 1987-88 there were several changes in ministry organization.

A group of employees in Kelowna bought the provincial Soil, Feed and Tissue Testing Laboratory and began private operation April 1, 1988 as part of government objectives encouraging private sector delivery of services.

Fish inspection functions of the ministry were transferred effective March 31, 1988 to the Ministry of Health.

During 1987 the government announced termination of the Property Management Program operated by the Farmland Resources Branch. The properties administered by this program were transferred to the Ministry of Forests and Lands for administration effective March 31, 1988.


British Columbia Ministry of Agriculture and Fisheries
Minister
Agricultural Land Commission
B.C. Milk Board
B.C. Marketing Board
Deputy Minister
Assistant Deputy Minister, Financial Assistance Programs
Agri-Food Regional Development (ARDSA)
Agricultural Finance
Farm Income and Crop Insurance
Aquaculture and Commercial Fisheries
Executive Director Policy Development and Economics
Farm Management Extension
Information Services
Policy Analysis & Coordination
Statistics Unit
Farmland Resources
Senior Advisor Food Industry & Market Development
Regulatory Marketing
Domestic Market Development
Export Market Development
Personnel Services
Executive Financial Officer
Audit Services
Financial Services
Systems Services
Facilities Services
Assistant Deputy Minister Field Operations
Animal Industry
Field and Special Crops
Crop Protection
Soils
Engineering
South Coastal Region
North Central Region
Southern Interior Region
Rural Organizations and Services

Related Agencies, Boards and Commissions

Agricultural Land Commission
B.C. Milk Board
British Columbia Marketing Board
B.C. Chicken Marketing Board
B.C. Cranberry Marketing Board
B.C. Egg Marketing Board
B.C. Grape Marketing Board
B.C. Hog Marketing Commission
B.C. Mushroom Marketing Board
B.C. Oyster Marketing Board
B.C. Tree Fruit Marketing Board
B.C. Turkey Marketing Board
B.C. Vegetable Marketing Commission
B.C. Sheep and Wool Commission

Legislation Administered by the Ministry of Agriculture and Fisheries

Agriculture and Rural
- Development (B.C.) Act
Agricultural Credit Act
Agricultural Land Commission Act
Agricultural Produce Grading Act
Agrologists Act
Bee Act
Cattle Horn Act
Dairy Industry (B.C.) Act
Farm Distress Assistance Act
Farm Income Insurance Act
Farm Product Industry Act
Farmers and Womens Institutes Act
Fish Inspection Act
Fisheries Act
Fur Farm Act
Grasshopper Control Act
Insurance for Crops Act
Livestock Act
Livestock Brand Act
Livestock Disease Control Act
Livestock Industry Act
Livestock Lien Act
Livestock Protection Act
Livestock Public Sale Act
Margarine Act
Meat Inspection Act
Milk Industry Act
Ministry of Agriculture and Fisheries Act
Natural Products Marketing (B.C.) Act
Pharmacists Act
Plant Protection Act
Prevention of Cruelty to Animals Act
Seed Grower Act
Seed Potato Act
Soil Conservation Act
Synthetic Food Products Act
Veterinarians Act
Veterinary Laboratory Act
Weed Control Act

British Columbia Ministry of Agriculture and Fisheries Offices

Ministers Office	Legislative Buildings, Victoria, B.C. V8V 1X4	387-1978
Head Office	808 Douglas, Victoria, B.C. V8W 2Z7	387-5121
Abbotsford	205-33780 Laurel Street V2S 1X4	852-5211
	Engineering Branch, 33832 South Fraser Way V2S 2C5	852-5363
	Agriculture & Food Centre, 32916 Marshall Rd. V2S 1K2	852-5350
	Veterinary Laboratory, Box 100 V2S 4N8	853-1161
Burnaby	Agricultural Land Commission, 4940 Canada Way V5G 4K6	660-7000
	Dairy Laboratory, 3705 Willingdon Ave. V5G 3H3	660-5499
Chilliwack	5-8635 Young Road South V2P 4P3	795-8395
Cloverdale	17720-57th Avenue, Surrey V3S 4P9	576-2911
Courtenay	209-420 Cumberland Road V9N 5M6	334-1239
Cranbrook	42-8th Avenue South V1C 2K3	426-1535
Creston	456 Northwest Boulevard, Box 1980 V0B 1G0	428-3255
Dawson Creek	1201-103rd Avenue V1G 4J2	784-2200
Duncan	238 Government Street V9L 1A5	746-1210
Fort St. John	201-9711 100th Avenue V1J 1Y2	787-3240
Kamloops	162 Oriole Road V2C 4N7	828-4552
Kelowna	1873 Spall Road V1Y 4R2	861-7211
Oliver	Court House, Box 940 V0H 1T0	498-2420
Penticton	3547 Skaha Lake Road V2A 7K2	492-1320
Prince George	Experimental Farm Site, R.R.#8, RMD 7 V2N 4M6	565-6466
Quesnel	208-350 Barlow Avenue V2J 2C1	992-4245
Salmon Arm	Samara Building, Box 639 V0E 2T0	832-1630
Sidney	Bldg. 20, Saanichton Research Station 8801 E. Saanich Rd. V8L 1H3	656-0941
Smithers	Government Building, Bag 5000 V0J 2N0	847-7246
Vancouver	Milk Board 800 South Cassiar St. V5K 4N6	660-7660
Vanderhoof	Church Avenue, Box 987 V0J 4K7	567-2111
Vernon	4607 - 23rd Street V1T 4K7	549-5580
Victoria	General Office, 808 Douglas Street V8W 2Z7	387-5121
Williams Lake	540 Borland Street V2G 1R8	398-4500